

Board of Directors Meeting Agenda

Date: June 15, 2023

Time: 6:00 p.m.

Location: SMUD Headquarters Building, Auditorium
6201 S Street, Sacramento, California

•AMENDED AGENDA

- Agenda Item 7 Added – Revisions to Board-Staff Linkage BL-8.**

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
BOARD OF DIRECTORS MEETING
SMUD HEADQUARTERS BUILDING
AUDITORIUM – 6201 S STREET
SACRAMENTO, CALIFORNIA**

June 15, 2023 – 6:00 p.m.

Virtual Viewing or Attendance:

Live video streams (view-only) and indexed archives of meetings are available at:
http://smud.granicus.com/ViewPublisher.php?view_id=16

Zoom Webinar Link: [Join SMUD Board of Directors Meeting Here](#)

Webinar/Meeting ID: 160 540 7431

Passcode: 274611

Phone Dial-in Number: 1-669-254-5252 or 1-833-568-8864 (Toll Free)

Verbal Public Comment:

Members of the public may provide verbal public comment by:

- Registering in advance of a meeting by sending an email to PublicComment@smud.org, making sure to include the commenter's name, date of the meeting, and topic or agenda item for comment. Microphones will be enabled for virtual or telephonic attendees at the time public comment is called and when the commenter's name is announced.
- Completing a sign-up form at the table outside of the meeting room and giving it to SMUD Security.
- Using the "Raise Hand" feature in Zoom (or pressing *9 while dialed into the telephone/toll-free number) during the meeting at the time public comment is called. Microphones will be enabled for virtual or telephonic attendees when the commenter's name is announced.

Written Public Comment:

Members of the public may provide written public comment on a specific agenda item or on items not on the agenda (general public comment) by submitting comments via email to PublicComment@smud.org or by mailing or bringing physical copies to the meeting. Comments will not be read into the record but will be provided to the Board and placed into the record of the meeting if received within two hours after the meeting ends.

Call to Order.

a. Roll Call.

1. Approval of the Agenda.

2. Committee Chair Reports.

- a. Committee Chair report of June 6, 2023, Strategic Development Committee
- b. Committee Chair report of June 7, 2023, Policy Committee
- c. Committee Chair report of June 14, 2023, Energy Resources & Customer Services Committee
- d. Committee Chair report of June 14, 2023, Finance and Audit Committee

Item 5 was reviewed by the May 10, 2023, Policy Committee. Items 6 and 7 were reviewed by the June 7, 2023, Policy Committee. Item 8 was reviewed by the June 14, 2023, Energy Resources & Customer Services Committee. Items 9 through 11 were reviewed by the June 14, 2023, Finance and Audit Committee.

Comments from the public are welcome when these agenda items are called.

Consent Calendar:

- 3. Approve Board member compensation for service rendered at the request of the Board (pursuant to Resolution 18-12-15) for the period of May 16, 2023, through June 15, 2023.
- 4. Approval of the minutes of the regular meeting of May 18, 2023.
- 5. Approve proposed revisions to **Governance Process GP-12, Board Compensation and Benefits**. Policy Committee 5/10. (Jose Bodipo-Memba)
- 6. Accept the monitoring report for **Strategic Direction SD-4, Reliability**. Policy Committee 6/7. (Frankie McDermott)
- 7. Approve proposed revisions to **Board-Staff Linkage BL-8, Delegation to the Chief Executive Officer and General Manager with Respect to Procurement**. Policy Committee 6/7. (Jennifer Davidson)
- 8. Adopt SMUD's 2023-2025 **Wildfire Mitigation Plan**. Energy Resources & Customer Services Committee 6/14. (Frankie McDermott)
- 9. Approve August 30, 2023, as the date for the **Public Hearing** for considering the **Chief Executive Officer and General Manager's Report and Recommendation on Rates and Services (CEO & GM Report)** dated June 15, 2023. Finance and Audit Committee 6/14. (Scott Martin)
- 10. Approve an increase to the aggregate contract not-to-exceed amount for distribution substation transformers by \$6 million, from \$32.4 million to \$38.4 million, for Contract No. 4600001232 with **Pennsylvania Transformer Technology, Inc.** and Contract No. 4600001382 with **Siemens Energy, Inc.** Finance and Audit Committee 6/14. (Jennifer Davidson)

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Discussion Calendar:

- 11. Approve increase to reimbursable technology expenses for local agency executives.
Finance and Audit Committee 6/14. **(Jose Bodipo-Memba)**.

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Public Comment:

- 12. Items not on the agenda.

Board and CEO Reports:

- 13. Directors' Reports.
- 14. President's Report.
- 15. CEO's Report.
a. Board Video

Summary of Board Direction

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Board Committee Meetings and Special Meetings of the Board of Directors are held at the SMUD Headquarters Building, 6201 S Street, Sacramento

June 14, 2023	Energy Resources & Customer Services Committee and Special SMUD Board of Directors Meeting	Auditorium*	6:00 p.m.
June 14, 2023	Finance and Audit Committee and Special SMUD Board of Directors Meeting	Auditorium	Immediately following the Energy Resources & Customer Services Committee and Special SMUD Board of Directors Meeting scheduled to begin at 6:00 p.m.

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**The Auditorium is located in the lobby of the SMUD Headquarters Building, 6201 S Street, Sacramento, California.*

Regular Meetings of the Board of Directors are held at the SMUD Headquarters Building, 6201 S Street, Sacramento

July 20, 2023

Auditorium*

6:00 p.m.

**The Auditorium is located in the lobby of the SMUD Headquarters Building, 6201 S Street, Sacramento, California.*

Members of the public shall have up to three (3) minutes to provide public comment on items on the agenda or items not on the agenda, but within the jurisdiction of SMUD. The total time allotted to any individual speaker shall not exceed nine (9) minutes.

Members of the public wishing to inspect public documents related to agenda items may click on the Information Packet link for this meeting on the smud.org website or may call 1-916-732-7143 to arrange for inspection of the documents at the SMUD Headquarters Building, 6201 S Street, Sacramento, California.

ADA Accessibility Procedures: Upon request, SMUD will generally provide appropriate aids and services leading to effective communication for qualified persons with disabilities so that they can participate equally in this meeting. If you need a reasonable auxiliary aid or service for effective communication to participate, please email Toni.Stelling@smud.org, or contact by phone at 1-916-732-7143, no later than 48 hours before this meeting.

DRAFT

RESOLUTION NO. _____

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

That this Board hereby approves Board member compensation for service rendered at the request of the Board (pursuant to Resolution 18-12-15) for the period of May 16, 2023, through June 15, 2023.

Sacramento, California

May 18, 2023

The Board of Directors of the Sacramento Municipal Utility District met in regular session simultaneously in the Auditorium of the SMUD Headquarters Building at 6201 S Street, Sacramento, telephonically at 114 West 40th Street, New York, New York, and via virtual meeting (online) at 6:01 p.m.

Roll Call:

Presiding: President Sanborn

Present: Directors Rose, Bui-Thompson (telephonically), Fishman, Herber, Kerth, and Tamayo

Present also were Paul Lau, Chief Executive Officer and General Manager; Laura Lewis, Chief Legal & Government Affairs Officer and General Counsel and Secretary, and members of SMUD's executive management; and SMUD employees and visitors.

Director Fishman shared the 2030 Clean Energy tip.

President Sanborn called for approval of the agenda. Director Kerth moved for approval of the agenda, Director Fishman seconded, and the agenda was unanimously approved.

President Sanborn announced that the winning team from the Youth Energy Summit was on hand to provide their presentation.

Kaelin Sherrel, an Education Specialist on the Community Education & Technology Center team and Coordinator for the Summit, provided a brief overview of the Youth Energy Summit where local students learn from industry professionals and were tasked with designing and implementing a community service project that reduced carbon emissions in our community and was themed Our Zero Carbon Future. She stated that the projects were of a two and one-half month duration and had several deliverables culminating with virtually presenting the project to a panel of judges. The four grand prize winners were:

- Team Sequoia (Folsom High School)
- Team Plastiglomerate (Vista Del Lago High School)
- Team DATAlus (Monterey Trail High School)
- Team Antic (Vista Del Lago High School)

Ms. Sherrel then introduced Team Sequoia, who was on-hand to present their project.

Team Sequoia from Folsom High School, comprised of team members Jessenia Chan, Neha Palani, Misha Ansari, and Harshitha Sheshala, presented their project, Team Sequoia: Food Waste. A copy of the slides used in their presentation is attached to these minutes.

President Sanborn commended the team on their project and encouraged them to continue because their work was important and impressive. Vice President praised the team for their effective communication and encouraged them to come to work for SMUD. Director Fishman stated their project and presentation was phenomenal, and encouraged to keep up the good work.

Director Bui-Thompson, Chair, presented the report on the Strategic Development Committee meeting held on May 9, 2023.

Director Tamayo, Chair, presented the report on the Policy Committee meeting held on May 10, 2023.

Director Kerth, Chair, presented the report on the Finance and Audit Committee meeting held on May 16, 2023.

Director Rose, Chair, presented the report on the Energy Resources & Customer Services Committee meeting held on May 17, 2023.

President Sanborn then called for public comment for items on the agenda.

Laurie Litman with Third Act Sacramento stated she was extremely disappointed in SMUD and the Board for endorsing the Calpine Project. She stated that carbon capture and sequestration (CCS) technology is unproven as a climate solution and asked how long SMUD would monitor the water, air, soil and residents to find out if CO₂ is leaking or causing other types of pollution.

Public comment on Agenda Item 9, copies of which are attached to these minutes, was also received from the following members of the public:

- Katie Valenzuela (Central Valley Air Quality Coalition), Barbara Leary (Sierra Club Sacramento), Dan Ress (Center on Race, Poverty & the Environment), Valerie Kuo (USC Environmental Student Assembly), Nailah Pope-Harden

(ClimatePlan), Robert M. Gould, MD (San Francisco Bay Physicians for Social Responsibility), Jack Eidt (SoCal 350 Climate Action), Herman Barahona (Sacramento Environmental Justice Coalition), Victoria Bogdan Tejada (Climate Law Institute, Center for Biological Diversity), Harry Wang, MD (Physicians for Social Responsibility Sacramento Chapter), Eric Romann (Physicians for Social Responsibility Los Angeles), Laurie Litman (Third Act Sacramento), Amanda Millstein, MD (Climate Health Now), David Dias, MPH (Active San Gabriel Valley), Shannon Smith (FracTracker Alliance), Daniel Chandler (350 Humboldt), Shoshana Wechsler (Sunflower Alliance), and Elise Kalfayan (Glendale Environmental Coalition)

- Rick Codina
- Jan Smutny-Jones
- Bud Beebe
- Derek Cressman
- Robert D. Ward, Business Manager (IBEW Local 340)
- California Governor's Office of Business and Economic Development
- Sacramento-Sierra's Building & Construction Trades Council

President Sanborn then addressed the consent calendar consisting of Items 4 through 9. Director Fishman moved for approval of the consent calendar, Director Kerth seconded, and Resolution Nos. 23-05-01 through 23-05-05 were unanimously approved.

RESOLUTION NO. 23-05-01

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

That this Board hereby approves Board member compensation for service rendered at the request of the Board (pursuant to Resolution 18-12-15) for the period of April 16, 2023, through May 15, 2023.

Approved: May 18, 2023

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

RESOLUTION NO. 23-05-02

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

This Board accepts the monitoring report for **Strategic Direction SD-8, Employee Relations**, substantially in the form set forth in **Attachment A** hereto and made a part hereof.

Approved: May 18, 2023

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: April 26, 2023

FROM: Claire Rogers *CR 4/26/23*

SUBJECT: Audit Report No. 28007602
Board Monitoring Report; SD-8: Employee Relations

Audit and Quality Services (AQS) received the SD-8 *Employee Relations* 2022 Annual Board Monitoring Report and performed the following:

- Selected a sample of statements and assertions in the report for review.
- Interviewed report contributors and verified the methodology used to prepare the statements in our sample.
- Validated the reasonableness of the statements in our sample based on the data or other support provided to us.

During the review, nothing came to AQS' attention that would suggest the items sampled within the SD Board Monitoring report did not fairly represent the source data available at the time of the review.

CC:

Paul Lau

Board Monitoring Report 2022

SD-8, Employee Relations



1. Background

Strategic Direction 8 (SD-8) states that:

Developing and maintaining a high quality, diverse and inclusive workplace that engages and inspires employees to commit to SMUD's purpose, vision and values is a core value of SMUD.

SMUD is committed to diversity and inclusion and will foster and support a workplace that values employees representing a variety of backgrounds, including but not limited to, race, ethnicity, gender, gender identification and/or expression, sexual orientation and identification, national origin, age, physical abilities, veteran status, socio-economic status, life experiences, talents, and thinking styles.

Therefore:

- a) SMUD shall attract and retain a highly qualified and diverse workforce.
- b) SMUD shall promote inclusion and diversity and engage its workforce in activities that demonstrate and support inclusion and diversity across the organization.
- c) SMUD shall engage its workforce in personal and professional development.
- d) SMUD's percentage of engaged employees as measured through the Engagement Index shall exceed 80%.
- e) SMUD shall use a broad mix of communication and outreach channels to ensure its recruitment activities reflect the diversity of the communities it serves.
- f) SMUD shall maintain and communicate written policies that define procedures and expectations for staff and provide for effective handling of grievances.
- g) Annually, and consistent with State and Federal law, the Board shall receive a report detailing the demographics and trends of the SMUD workforce, the available workforce, and the Sacramento region. The report shall also provide information on veterans as a part of SMUD's workforce.

2. Executive Summary

SMUD is in full compliance with SD-8, Employee Relations.

A number of enhancements to SMUD's culture and people programs were made possible in 2022 thanks to a strong partnership among the Workforce, Diversity & Inclusion business units. We opened the Bright Path to Learning Child Development Center in partnership with Sac State and UC Davis Health; launched SMUD's Diversity, Equity, Inclusion & Belonging (DEIB) Council; piloted the Powering Careers program for skilled trades; negotiated a successor Memorandum of Understanding with the SMUD Public Safety Officer's Association (PSOA); implemented the new technology we use to manage people systems and processes; and much more, as outlined in the following report.

SD Requirement	SD Support (Program, Policy, Procedure or Initiative)	Purpose	Outcome	Notes
a)	Career Ambassador Program Powering Careers Education Outreach	Increase future workforce talent while simultaneously engaging employees through early outreach & connection with future pipeline (K-12, college, and community)	Reached 17,495 students and community members 16 graduates; 6 hires 13,870 students engaged in learning about SMUD's Zero Carbon effort and related energy industry careers.	78 total Career Ambassador outreach events completed (53 in-person, 25 virtual).
b)	Employee Resource Groups	Contribute to an inclusive work culture by creating a sense of community and promoting education and awareness in alignment with SMUD's mission and values and our Inclusion Policy	45 ERG events supported business initiatives; including Safe Zone Advocacy Training, Golf Lessons, Community Blood Drive, and ERG Learning Week Sessions	An increase in collaborations between ERGs and local organizations helped foster meaningful community connections. DEIB Council convened in June 2022 with representatives from each business area and SMUD's ERGs.
	Corporate Learning & Development Curriculum	Develop skills and leadership competencies that will support SMUD's current and future business strategy	Employees averaged 29 hours of training throughout 2022	Average training hours increased 16% (up from 25 hours in 2021)
c)	Internal & External Leadership Programs	Provide experiential learning opportunities to develop leadership, and support collaboration and philanthropy in the community	21 employees completed or graduated from nine different local and regional leadership development programs. Added Leadership Folsom to program offerings in 2022.	23 employees participated in 2022 leadership programs.

	Internships	Strengthen talent pipeline by immersing students of varied backgrounds in SMUD's culture and careers	1,659 college intern applicants, 55 college interns hired; 80 high school intern applicants; 17 high school interns hired	Internship program was scaled in response to COVID-19 and SMUD's hiring strategy. We will reevaluate organizational readiness in 2023.
	Powering Futures Scholarships	Support diverse talent pipeline in community and STEM disciplines	21 scholarships were awarded.	The scholarships ranged from \$1,750 for Community College students to \$4,000 for 4-year University students.
e)	Hornet Leadership Program - SMUD cohort	Support talent pipeline and STEM disciplines in community	The sponsorship was allocated as a HLP Conference Sponsor, funded 3 scholars (engineering and computer science students), and 1 Facilitator.	SMUD donated to this program at the \$25,000 sponsorship level, used to fund scholarships and assist with program administration.
f)	Code of Business Ethics and Employee Conduct	Provide an easy-to-read explanation of SMUD's values and expectations for employee behavior	100% compliance	Code supplements SMUD's state law-mandated Conflict of Interest Code.
g)	Workforce Demographics Reporting	Provide informational update on workforce demographics	Identify and report on trends and ongoing efforts for a high quality, diverse and inclusive workforce	See SD-8 appendix for detailed reporting.

3. Additional Supporting Information

Please see attached Appendix for additional information related to the SD-8 metrics.

4. Challenges

While we noted changes in some areas of SMUD's workforce demographics, low employee turnover inhibits the speed of substantial change. We continue to enrich our workforce by investing in its future via the regional talent pipeline, developing programs and outreach to grow the competencies needed to accomplish SMUD's 2030 goals. The challenge lies in ensuring the region's workforce development and education continue to align with SMUD's competencies so that we may collaboratively support job readiness and equitable access to

future employment.

5. Recommendation

As reflected in this report, SMUD has achieved the goals set forth in SD-8 for ensuring SMUD develops and maintains a high quality, inclusive workplace that engages and inspires employees to commit to SMUD's purpose, vision, and values.

It is recommended the Board accept the monitoring report for Strategic Direction 8.

Appendix

a) SMUD shall attract and retain a highly qualified workforce.

Attracting and Retaining our Workforce

Talent Acquisition (TA) continues to partner with stakeholders – both internal and external to SMUD – to increase pipelines, such as via apprenticeships and internships. TA has fine-tuned its outreach strategy to increase diversity of applicant pools by refreshing community contact lists and strategically communicating job opportunities to underrepresented populations. The TA team partnered with internal hiring management and panel members in a continued commitment to DEIB, including the incorporation of workforce demographic data, and a deeper education of the impacts of unconscious bias by implementing a mandatory training for all hiring panel members. TA partners with our Total Rewards team, including Classification & Compensation, to ensure equity in the starting and continuing pay of our employees and a competitive Total Rewards package. SMUD signed the Equal Pay CA Pledge in 2022, committing to: conducting an annual gender pay analysis; reviewing hiring and promotion processes to reduce unconscious bias; and promoting equal pay best practices.

Career Ambassadors – Talent Pipeline

SMUD Career Ambassadors shifted their approach from representing SMUD at in-person events such as career fairs, career exploration, and mock interviews, to a hybrid approach attending and hosting virtual career events. Career Ambassadors attended 78 events in total -- 25 virtual and 53 in-person. They invested 200 hours in 2022 and reached 17,495 members of the community. Additionally, an enhanced partnership with our Education Outreach program engaged 13,870 students in learning about SMUD's Zero Carbon effort and related energy industry careers.

Wellness

For 2022, we continued with our reimagined Wellness/Health Assessment Program (HAP) focused on the 4 pillars of Wellness: Social, Mental, Physical, and Financial. A broader range of activities was provided virtually in support of this holistic approach. Emphasis was placed on mental wellness including two workshops provided by Kaiser and work/life balance. We offered greater flexibility and options to participants to achieve their Wellness/HAP goals by collaborating with our Wellness partners (SMUD ERGs, Kaiser, Sutter Health, United HealthCare, SAFE Credit Union, Wells Fargo Bank, Fidelity Investments, and OptumHealth).

Benefits

Open enrollment in 2022 consisted of 6 virtual meetings for employees and retirees and 2 onsite meetings for our Field forces. We continue to utilize a well-received Virtual Benefit Fair platform to provide benefit information to our employees and retirees, as well as new and prospective employees through an easy to use and fun web portal, accessible from any device. This platform provided for all their benefit needs including benefit guidebooks, plan summary documents, and the ability to send questions to our benefit providers. Additionally, Benefits staff in Total Rewards worked to address the rising cost of health care and were able to negotiate an overall medical renewal increase of 0.31%, a significant decrease from last year's 5.3% increase.

Retention

SMUD's turnover decreased in 2022, from 7.7% in 2021 to 7.0%. This decrease can be attributed to fewer Retirements in 2022. Retirements decreased from 92 in 2021, to 78 retirements in 2022. SMUD's turnover continues to rank below the industry benchmark of 10.1%. In addition to SMUD's Baby Boomer workforce entering retirement eligibility, this data also aligns with the cyclical pattern we've seen in retirements over time. Historically, we see these numbers rise in small waves that crest every three to four years.

b) SMUD shall promote inclusion and diversity and engage its workforce in activities that demonstrate and support inclusion and diversity across the organization.

Employee Resource Groups

The 8 ERGs at SMUD include:

- Black Employee Resource Group (BERG)
- Asian Pacific Islander (GRAIN ERG)
- Latinos Unity Network for Action (LUNA)
- Military Employee Resource Group (MERG)
- People Reaffirming Inclusion Diversity and Equality (PRIDE)
- Women's Employee Resource Group (WERG)
- Young Professionals Employee Resource Group (YP)
- Parents ERG

Employee Resource Groups (ERGs) helped foster inclusion among our workforce by hosting events that support business initiatives including Safe Zone Advocacy Training, a community blood drive, and three ERG Learning@SMUD sessions. The events help to keep employees connected, and offer professional and personal development opportunities including several collaborative events co-hosted with community organizations in SMUD's service territory.

DEI Initiatives

The Diversity, Equity and Inclusion (DEI) team completed several foundational streams of work to enhance SMUD's culture in 2022.

- In addition to refining the DEI mission and vision, the team also identified three areas upon which to focus its work: (1) Advancing Data; (2) Implementing and Applying DEIB; and (3) Aligning and Connecting DEIB across SMUD.
- They partnered with People Services & Strategies (PS&S) to enhance and roll out SMUD's Diversity, Equity, Inclusion & Belonging (DEIB) Strategy from May through October 2022. This effort included hiring an external consultant to facilitate a working group that provided recommendations to the strategy's inclusive culture pillar. The DEI Team also incorporated the concept of "Belonging" in the strategy, reflecting the importance of creating a workplace and culture that allows all people to: be their authentic selves; feel they truly belong; and experience psychological safety at SMUD.
- The team also engaged public agencies across Sacramento to establish a working group, including Caltrans, City of Sacramento, Sacramento State University, and SETA, to collectively advance the region's DEI efforts.

- Additionally, the DEI team provided internal consultation on DEIB matters to business units across SMUD, including the curation of a learning path of DEIB resources for employees.

Diversity, Equity, Inclusion and Belonging (DEIB) Council

The primary role of SMUD’s DEIB council is to connect DEIB activities and goals to all our operations. The Council, which convened in June 2022, is comprised of a group of twenty employees who represent each business area and SMUD’s ERGs. This body of representatives advises, advocates for, informs, assesses and/or monitors the DEI strategic process, as well as provides recommendations to the DEI Department on behalf of SMUD. Over the course of 2022 and early 2023, they have accomplished the following:

Timeline of Accomplishments - 2022

MAY	JUN	JUL	AUG	SEP	OCT	
<ul style="list-style-type: none"> • Training • DEIB Council Onboarding. • Learned about DEIB, and our DEIB Strategy. 		<ul style="list-style-type: none"> • Community Agreements. 			<ul style="list-style-type: none"> • Reflection Activity – base for how Council Members will function. 	FOUNDATIONAL
			<ul style="list-style-type: none"> • Identified our DEIB Council Chair & Vice Chair. 	<ul style="list-style-type: none"> • Identified our parliamentarian & co-parliamentarian 	<ul style="list-style-type: none"> • Identified & established Lead, Co-Leads, Subcommittee Members 	ROLES
	<ul style="list-style-type: none"> • Adopted Roberts Rules of Order. 	<ul style="list-style-type: none"> • DEIB Council SharePoint site • Established and defined a DEIB Win Spotlight 	<ul style="list-style-type: none"> • Communication process for Meeting Minutes & Liaison Share 	<ul style="list-style-type: none"> • Information Intake Process. • Attendance & Participation Policy & Procedure. 	<ul style="list-style-type: none"> • Collaboration between subcommittees and SMEs of respective projects. • Identified metrics. • Enhanced our subcommittee report out template 	ADMINISTRATIVE



Timeline of Accomplishments – 2022 to 2023

NOV	DEC	JAN	FEB	MAR	APR, MAY, ...	
<ul style="list-style-type: none"> • Holiday survey input. 	<ul style="list-style-type: none"> • First hybrid DEIB Council Meeting. • Intake process utilized for first time; 2 guest attendees. • Budget discussion. 		<ul style="list-style-type: none"> • Examine, review all DEIB processes for improvements.. 			ADMINISTRATIVE
<ul style="list-style-type: none"> • Equity – provide draft recommendation on defining equity. • Inclusive Culture – provided a survey summary regarding inclusive culture 	<ul style="list-style-type: none"> • Diverse Workforce – Outreach Project: provided recommendations. 	<ul style="list-style-type: none"> • Diverse Workforce – Diverse Panel Project: provided recommendations. 	<ul style="list-style-type: none"> • Community Impact – identified gaps in Shine Program outreach internally (educational component).. 			PROJECT/INITIATIVE

*Conduct Monthly
DEIB Council Meetings – since Jun 2022
DEIB Win Spotlight – since Aug 2022
Subcommittee Meetings - since Oct 2022*



c) SMUD shall engage its workforce in personal and professional development.

The learning and development teams at SMUD are responsible for creating and implementing training courses and programs that cater to the professional growth and on-the-job development needs of employees. These learning objectives are closely linked with SMUD's Strategic Directives, and course offerings are reviewed at least quarterly to ensure alignment with the business strategy. The training courses are offered in a blended format, incorporating classroom, online, and self-directed learning to meet the diverse learning styles and preferences of employees. In 2022, we shifted into our Speed of Trust reinforcement and strengthening phase. A Trust sustainment collaborative (cross functional advisory team of leaders) was formed to determine a wholistic approach to cultivating organization trust. Three trust sustainment themes were identified: culture, communications, and learning. Corresponding actions included 8 Trust Foundations training sessions for leaders and staff across SMUD (61 employees), a new comprehensive set of Trust sustainment tools for all leaders, as well as post-class follow up consultations for staff across the business.

With the additional availability of online training courses via the LinkedIn Learning platform, 2022 showed nearly double the employee utilization. This significant growth in utilization is attributed to increased user comfort and adoption spurred by (but not limited to) new LinkedIn Learning development paths mapped to SMUD's competencies as well as DEIB's strategic goals; all while meeting custom learning path needs related to business goals and objectives (i.e., technical skills, project management, health and wellness, coaching and feedback, DE&I, and leading in a remote environment).

There were 2,507 employees who received virtual-classroom and computer-based training in 2022, with an average of 29 training hours per individual. We saw 799 employees leverage the LinkedIn Learning platform and complete courses totaling more than 2059 hours. We had a slight decrease in the average time spent on LinkedIn Learning from 2.77 in 2021 to an average of 2.57 in 2022. However, the total number of employees who took LinkedIn Learning nearly doubled from 472 in 2021 to 799 total employees in 2022. Mandatory training ranges from 6.25 to 36.25 hours depending on the employee's position and included enterprise-wide, cross-functional, and department-specific requirements. Course materials covered a wide range of topics including project management, Microsoft applications, leadership development, diversity and inclusion, and information technology (IT) skills.

Leadership Development

To complement the ongoing internal development opportunities afforded SMUD leaders, an external leadership development selection process is conducted annually to match applicants with a program that effectively meets their development needs and SMUD's business objectives. In 2022, we sent 23 employees to several local and regional leadership development programs including Nehemiah Emerging Leaders, WEI Business Acumen for Emerging Leaders, Asian Pacific Chamber Catalyst program, Leadership Rancho Cordova program, Leadership Elk Grove, Leadership Sacramento, Nueva Epoca, Leadership Folsom, and SMUD's (internal) Building Leadership Talent program.

Education Assistance

The education assistance benefit supports employees who are pursuing college degrees and developing their SMUD careers by completing certificates or taking individual classes that support our business. We offer up to \$5,000 per calendar year for qualified, regular full-time employees to partake in eligible programs, and up to \$2,500 for part-time employees. Many employees use the program to pursue an Associate's, Bachelor's or Master's degree in areas as wide-ranging as accounting, law, finance, human resource management, information technology, project management and organizational leadership.

d) SMUD's percentage of engaged employees as measured through the Engagement Index shall exceed 80%.

In 2022, we focused on responding to the results of our fall 2021 Employee Engagement Survey, which were previously shared with the Board. Those results included more data from an expanded number of DEIB questions (increased from five to ten) which allowed us to understand more fully employees' experiences of diversity, equity, inclusion and belonging. We also included in 2021 two new survey items about innovation and well-being.

Our 2022 response strategy had two components. First, we responded at an organizational level through development of our DEIB strategy, which includes a focus on powering a more inclusive culture. Specifically, the strategy sets meaningful goals and metrics for increasing psychological safety, belonging, transparency, and organizational commitment to DEIB. In addition, this fall we convened a cross-department stakeholder group of employees to develop a multi-year implementation plan to achieve the goals and metrics we've set for a more inclusive culture.

The second way we responded to our survey data was at the team level. Every leader who had an engagement report discussed the results with their team to understand what positive steps could be taken to improve. We also held two trainings, reaching 160 leaders, to support leader capability in interpreting their report, leading their team conversation and identifying meaningful actions that would result in higher engagement.

The action plans that resulted from these team-level conversations focused on themes such as improving communication, increasing opportunities for growth and development, giving employees more voice in shaping the work of the team, or improving work/life balance, to name some of the most frequent themes. Senior leaders also addressed themes around accountability, trust, and care for the employee experience that require senior leader attention. Taking meaningful action on engagement results was our Enterprise Performance Goal for Culture in 2022, and we achieved this goal with 96% of leaders developing and acting on that plan. We will conduct a pulse survey in 2023 to assess our progress.

- e) **SMUD shall use a broad mix of communication and outreach channels to ensure its recruitment activities reflect the diversity of the communities it serves.**

Talent Acquisition (TA)

In 2022, Talent Acquisition Partners (TAPs) pivoted to incorporate more online examination options to reach a broader audience of applicants and allow for flexibility in establishing eligibility lists. We continue to conduct employment outreach with educational institutions, including an enhanced partnership with Sacramento State University – leveraging their students as SMUD ambassadors within the community. TAPs maintain categorized contacts within the community to ensure outreach to underrepresented populations for recruitments. Marketing includes a combination of email distributions, job board postings, LinkedIn advertisements, and social media platforms, as well as Daily Updates to our most valuable network - our employees.

Employment Outreach and Partnerships

Improved collaboration among Talent Acquisition, Sustainable Communities, and Community Engagement resulted in the receipt of 15,413 external candidate applications in 2022.

SMUD's Regional Workforce Development program partnered with 54 community organizations to reach 3,346 youth and adults with career education and train 506 adults in new skills. This partnership placed 241 of these trainees into careers spanning several industries with emphasis given to 2030 Zero Carbon aligned skills and careers. The highlight of this partnership was the training and hiring of six SMUD's Powering Careers graduates. In 2023, SMUD is redoubling its zero carbon jobs training with new programs focusing on electric vehicle maintenance, electrician trainees, and construction electrification.

SMUD leveraged its Regional Workforce Development efforts to help diversify the pool of qualified and motivated candidates applying for SMUD positions. For example, SMUD recruited participants for its highly innovative Powering Careers program through our Solar Training program in partnership with Grid Alternatives. Grid Alternatives identified some of the top graduates from its highly diverse program targeting under-resourced communities. Two candidates from Grid's program ultimately applied for, participated in, and successfully graduated from SMUD's Powering Careers program.

Internships

With COVID restrictions easing up, SMUD was able to increase our internship offerings in 2022 from the previous year. We continued utilizing students in a mostly remote capacity with a few opportunities for on-site interaction with their business units and cohort. Whereas we've traditionally hosted in-person showcases for employees and community partners to learn about intern work, we continued to illustrate the student accomplishments and projects in a virtual setting.

Interns tackled a variety of important initiatives for the organization, including but not limited to the following:

- Name Pronunciation Project, designed to assist with the correct pronunciation of employees' names by providing an audio file link to the pronunciation in email signatures
- SEA Website Management
- Help Desk support for the Compaction Checking Algorithm project
- User acceptance testing supporting SMUD's SharePoint upgrade
- IT training documents to enhance the New Employee Orientation experience
- Datch pilot, allowing trades workers to fill out documents faster
- Lone-worker Safety Project, enabling field workers who work alone to alert others and dispatch help if they become incapacitated
- Long Duration Energy Storage Request for Information
- Biomass Gasification Research
- Outstanding data sharing requests for the Data Governance team

Powering Futures scholarships

Twenty-one recipients were awarded up to \$4,000 each and included local students registered in a degree program. Those with a demonstrated financial need pursuing majors related to careers in SMUD received preference. Along with the scholarships, students were also presented with an opportunity to receive a paid internship.

Powering Aggies and Powering Hornets Scholarship Programs

The Powering Aggies and Powering Hornets Scholarship programs were set up in 2018 to provide a scholarship for 1 student each from UC Davis and Sac State. Eligible students who majored in a SMUD-related career field (UC Davis) or Electrical Engineering (Sac State) were selected by their respective universities. In 2022, SMUD awarded the Powering Aggies winner \$1,800 and the Powering Hornets winner \$2,500.

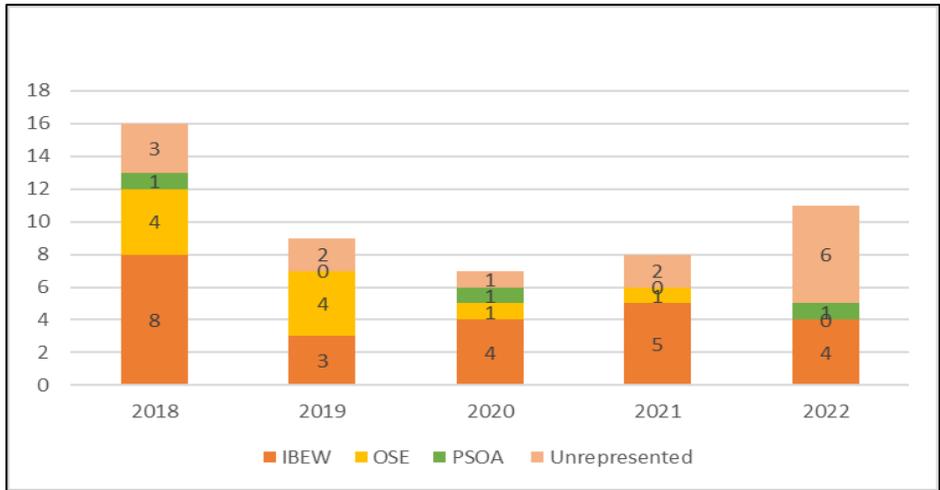
Internship Outreach

The internship program's current outreach strategy involves continuing to develop new relationships with universities after the COVID-19 Pandemic and redesigning our existing workshops and events to better meet the needs of our university partners. We designed a new outreach workshop labeled Through the Eyes of a Recruiter and presented it at UC Davis, Sac State, Chico, Los Rios College District, UOP, and Sierra College. The internship program team attended 24 events in 2022 and presented to more than 1,200 students. The outreach for SMUD's summer internship program saw a 90% increase going into 2023.

f) SMUD shall maintain and communicate written policies that define procedures and expectations for staff and provide for effective handling of grievances.

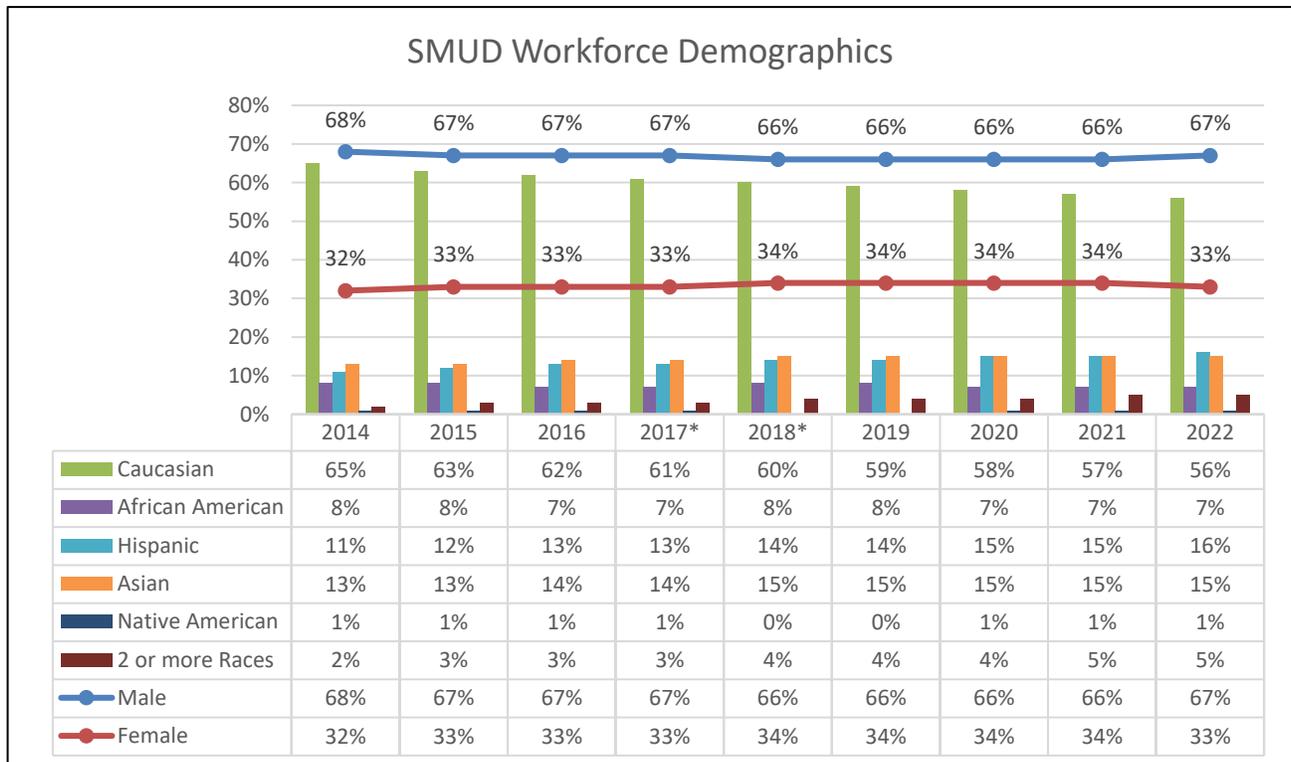
In addition to SMUD's Code of Business Ethics and Employee Conduct, its Employee and Labor Relations teams provided daily advice, guidance and counsel to employees on employee relations issues. Staff worked to ensure all employees (represented and unrepresented) understand SMUD policies and procedures, and that employees know and understand what their responsibilities are with respect to the Code of Ethics.

A total of 11 grievances were resolved in 2022.



g) Annually, and consistent with State and Federal law, the Board shall receive a report detailing the demographics of the SMUD workforce, the available workforce, and the Sacramento region. The report shall also provide information on veterans as a part of SMUD’s workforce.

The following chart provides demographic information about SMUD’s workforce (excluding “casual” positions and members of the Board of Directors).



Percentages may not add up to 100% due to rounding.

Regional Demographics

	Sacramento, El Dorado & Placer Co. (Civilian) *	Sacramento Co. (Civilian) *	Sacramento Co. (Total Population)**
Caucasian	55%	48%	41%
African American	7%	9%	9%
Hispanic	20%	22%	24%
Asian	14%	17%	19%
Native American	0%	0%	0%
2 or more Races	4%	4%	7%
Male	52%	52%	51%
Female	48%	48%	49%

The “Civilian” labor force referenced in this chart represents residents aged 16 and older. These numbers exclude houseworkers, unpaid volunteers, institutionalized individuals, and U.S. Armed Forces Active Duty.

*2018 American Community Survey, 5-Year Estimates EEO
 **2020 United States Census (April 1, 2020)

We saw a shift in SMUD’s 2022 workforce demographics with Caucasian employees representing 56% of the workforce, down from 57% in 2021. This shift occurred as the representation of Hispanic employees increased by 0.8% in 2022. Employee turnover, which creates opportunities to hire, and our expanded outreach strategies are the likely drivers for this change as SMUD continues to develop its talent pipeline and build a workforce that reflects the diversity of the communities we serve.

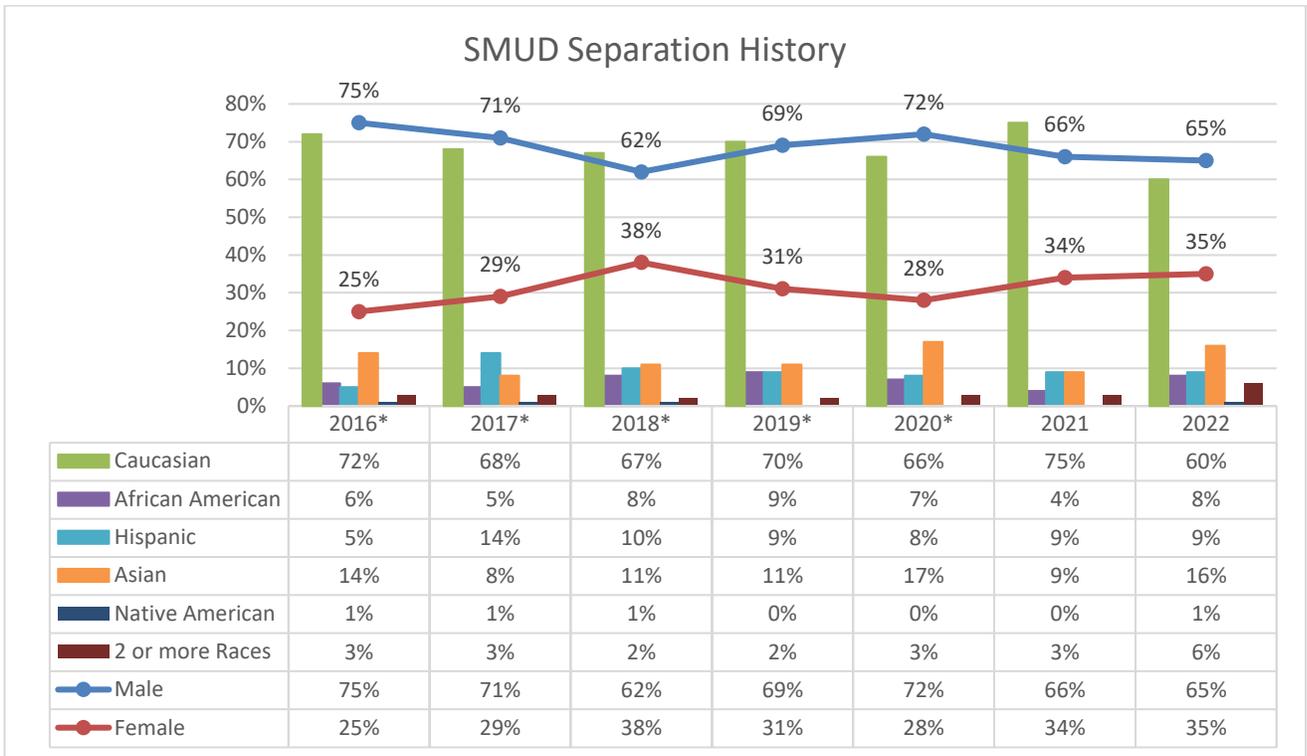
2022 SMUD Workforce Demographics by Employee Level

	Male	Female	Caucasian	African American	Hispanic	Asian	Native American	2 or more Races
Executives	60%	40%	50%	10%	0%	30%	0%	10%
Directors*	59%	41%	69%	9%	6%	9%	0%	6%
Managers*	62%	38%	69%	3%	7%	13%	1%	6%
Supervisors	66%	34%	62%	7%	10%	16%	0%	5%
Staff*	67%	33%	54%	7%	17%	15%	1%	5%

* Percentages may not add up to 100% due to rounding.

**SMUD Separation History
 (Full-Time Employees Only)**

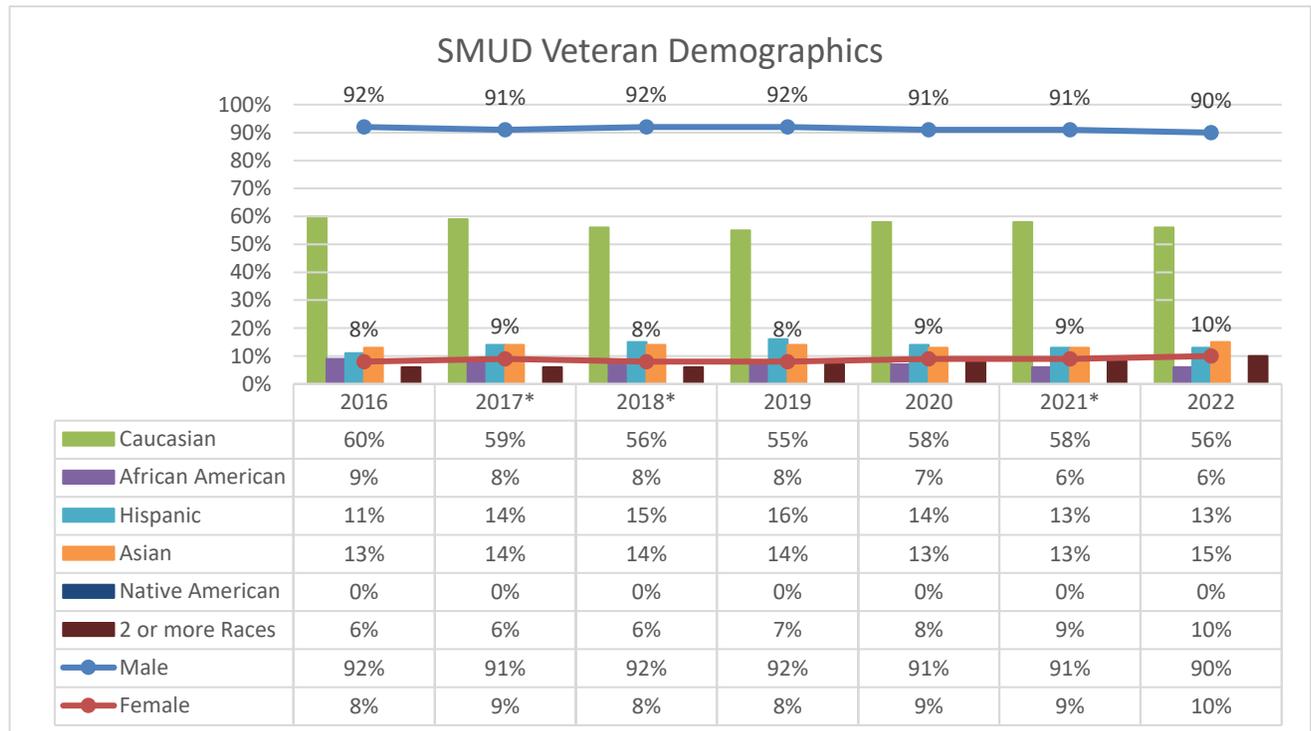
We saw a shift in the demographics of separating employees last year, with Caucasian employees representing 60% of the separations in the workforce in 2022, down from 75% in 2021. This shift was offset by an increase of 4% for African Americans employees, a 7% increase for Asian employees, and a 3% increase for employees with two or more races. People Services & Strategies is scoping enhancements to SMUD’s on- and off-boarding processes, including opportunities for trend reporting and further exploration of themes in separation data.



* Percentages may not add up to 100% due to rounding.

Military Veterans in SMUD's Workforce

Veterans are a small but important part of SMUD's workforce. According to our records, Veterans comprised 4.5% of SMUD's workforce in 2022, down from 5.1% in 2021. This decrease is the result of 7 veteran retirements in 2022.



* Percentages may not add up to 100% due to rounding

RESOLUTION NO. 23-05-03

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

This Board accepts the monitoring report for **Strategic Direction SD-12, Ethics**, substantially in the form set forth in **Attachment B** hereto and made a part hereof.

Approved: May 18, 2023

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: April 26, 2023

FROM: Claire Rogers *CR 4/26/23*

**SUBJECT: Audit Report No. 28007603
Board Monitoring Report; SD-12: Ethics**

Audit and Quality Services (AQS) received the SD-12 *Ethics* 2022 Annual Board Monitoring Report and performed the following:

- Selected a sample of statements and assertions in the report for review.
- Interviewed report contributors and verified the methodology used to prepare the statements in our sample.
- Validated the reasonableness of the statements in our sample based on the data or other support provided to us.

During the review, nothing came to AQS' attention that would suggest the items sampled within the SD Board Monitoring report did not fairly represent the source data available at the time of the review.

CC:

Paul Lau

Board Monitoring Report 2022

SD-12, Ethics



1. Background

Strategic Direction 12 states that:

Maintaining the public trust and confidence in the integrity and ethical conduct of the Board and SMUD employees is a core value. Therefore, to ensure the public interest is paramount in all official conduct, the Board shall adopt and update, as necessary: a Conflict of Interest Code as required by State law. SMUD shall also maintain and enforce a code of conduct applicable to all employees.

Among other things the code of conduct shall:

- a) Require high ethical standards in all aspects of official conduct;
- b) Establish clear guidelines for ethical standards and conduct by setting forth those acts that may be incompatible with the best interests of SMUD and the public;
- c) Require disclosure and reporting of potential conflicts of interest; and
- d) Provide a process for (i) reporting suspected violations of the code of conduct and policies through multiple channels, including an anonymous hotline, and (ii) investigating suspected violations.

2. Executive Summary

SMUD is in compliance with the requirements of SD-12.

Strategic Direction 12 requires SMUD to have a process to report potential conflicts of interest and a process for reporting and investigating suspected violations of the Code of Conduct.

Compliance is foundational for acting in the best interests of our customers and community. Several SMUD policies and procedures support the requirement of high ethical standards in all aspects of official conduct.

SD Requirement	Supporting Process/Procedure
a) Require high ethical standards	SMUD's Ethics policy (AP 05.02.03) sets the requirements and expectations for ethical behavior, including communication, training and other resources.

b) Establish clear guidelines for ethical standards and conduct	SMUD’s Code of Business Ethics and Employee Conduct were updated and approved by the CEO & General Manager in 2020. SMUD’s Ethics procedure (MP 05.02.03.100) was adopted in 2008 and updated in January 2021. SMUD’s Conflict of Interest policy (AP 05.02.02) was adopted in 1998 and approved by the FPPC (Fair Political Practices Commission) in 2023.
c) Require disclosure and reporting potential conflicts of interest statements	Notice of filing requirements were sent to employees in March. 99% of the annual conflict of interest statements were received by the time this report was finalized.
d) Provide a process for reporting and investigating suspected violations of the code of ethics	SMUD’s Whistleblower Anti-Retaliation policy (AP 05.01.03) was approved in 2014. SMUD’s Complaint Process Policy (AP 05.01.04) was adopted in 2006 and updated in August 2022. SMUD’s Ethics and Compliance Hotline has been in place since 2008.

3. Additional Supporting

Information Ethics Policy

In accordance with Board Policy SD-12 Ethics, SMUD developed the Code of Business Ethics and Employee Conduct, approved by the CEO & General Manager in 2020. This document supplements SMUD’s State-law mandated Conflict of Interest Code and provides an easy-to-read explanation of SMUD’s values and expectations for employee behavior. It also identifies various staff resources to obtain further guidance, as well as alternative methods to report suspected violations of SMUD’s Code of Business Ethics. The Code provides a framework for how employees should act toward customers, vendors and each other. It also emphasizes that as a publicly-owned utility, SMUD and its employees must adhere to the highest ethical standards.

All new employees receive a copy of SMUD’s Code of Business Ethics prior to or during new employee orientation and are required to review and submit a signed acknowledgement to People, Services & Strategies within 30 days of orientation. In addition, all contractors with unescorted access receive a copy of the Code when their background check is conducted. PS&S verifies Code acknowledgements on a quarterly basis to ensure signed acknowledgments are received from all new employees and contractors.

Ethics Training

Ethics training is a mandatory requirement for all SMUD employees. They are required to complete the training every 2 years on a fixed rotating schedule. New and returning employees have one year for completion while newly promoted leaders are required to take Ethics training within 90 days of promotion into their role. Course completion is tracked using SMUD's Learning Management System (LMS) and reported as part of SMUD's mandatory training statistics. The 2022 completion rate for employees with 2022 due dates is 99.59%.

For the 2022 course cycle, as of March 13th, 2023, a total of 243 employees have been assigned the training since January 1, 2022. In 2022, 242 employees completed the training, 1 employee is in-progress with 2022 due dates. The employees who were assigned the Ethics training are either 2021 new hires or are recently promoted leaders.

Disclosure and Reporting of Potential Conflicts of Interest

The Political Reform Act (Cal. Gov. Code §§ 81000, et seq.) requires certain government officials and employees to publicly disclose certain financial information relevant to the scope of decision-making for their positions with SMUD.

To maintain compliance, all employees in positions designated by the SMUD Board must complete and submit an annual Statement of Economic Interests, FPPC Form 700 (Conflict of Interest Statement). Incumbents of designated positions shall file an Assuming Office Statement within 30 days of starting their employment or beginning the new position. Employees in designated positions who leave SMUD shall file Leaving Office Statements within 30 days of their final dates of employment.

The annual Conflict of Interest Statements are public documents filed with Corporate Records or in the designated record repository. PS&S sent financial disclosure materials electronically to designated employees in March and successfully met the FPPC filing deadline of April 3. At the time of this report, 99% percent of the annual Conflict of Interest Statements from SMUD officials and designated employees were received. PS&S staff follows up to ensure total compliance. In the rare event that full compliance is not achieved, SMUD is obligated to report violations to the FPPC for enforcement. This has occurred only two times in the last decade.

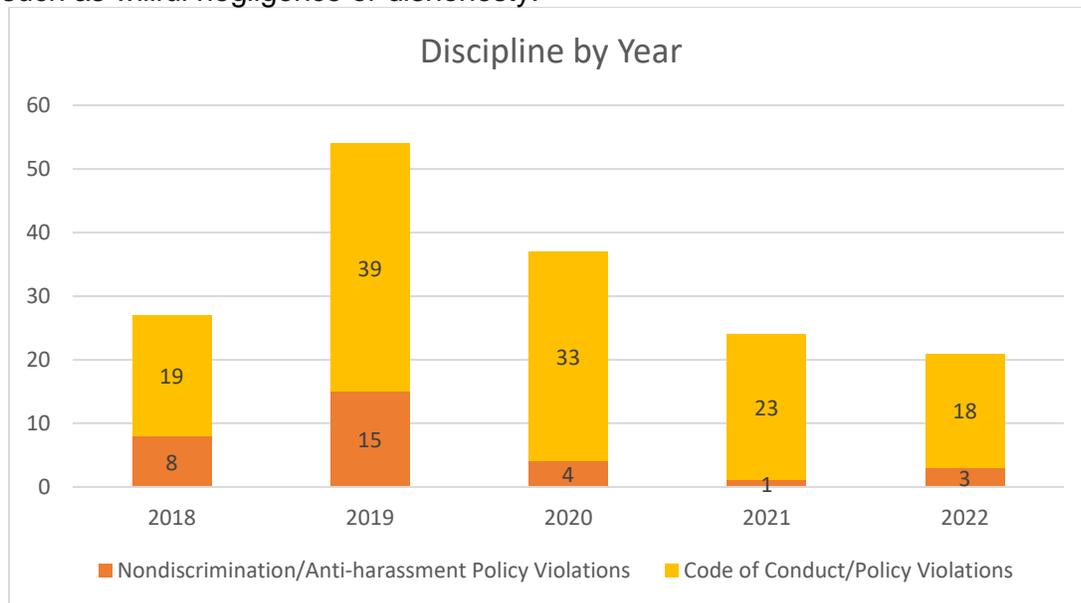
Process for Reporting and Investigating Suspected Violations

SMUD holds its employees to a higher standard than that required by law and is committed to providing a work environment in which all individuals are treated with dignity and respect. SMUD encourages employees to bring concerns about potential legal violations or violations of SMUD policies to the attention of a SMUD leader. All SMUD leaders are required to immediately report all complaints they receive regarding suspected policy violations to the Fair Employment Office. An employee who believes that they are unable to make a complaint through their management reporting line may report complaints directly to the Fair Employment Office, Labor Relations, Internal Auditor's or General Counsel's Office. Additionally, SMUD has contracted with Navex Global Compliance since November 2008 to operate an anonymous Ethics and Compliance Hotline. This hotline can be used by employees to file complaints anonymously should they so

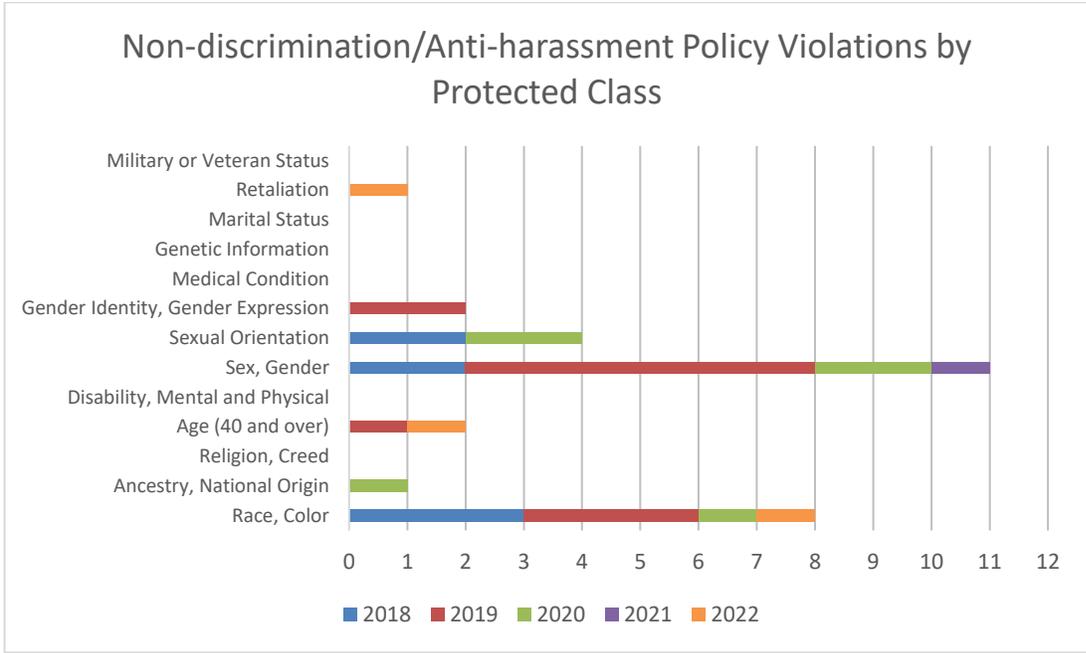
choose, either online or by calling Navex Global Compliance directly. As part of SMUD’s Complaint Process and Whistleblower Anti-Retaliation policies, a Whistleblower Committee was established to review and act, when appropriate, on hotline/whistleblower complaints. The committee is comprised of representatives from the General Counsel’s office, Audit & Quality Services and PS&S, including members of our Fair Employment Office and Labor Relations team.

In addition to investigating potential violations of SMUD’s Nondiscrimination, Anti-Harassment and Non-Retaliation Policy (AP 05.01.01) and Code of Ethics, Labor Relations and Fair Employment analysts also advise, consult with and support leaders on recommended action and coaching to address problematic behaviors and attitudes among the workforce that are not necessarily prohibited by law. This includes working with a leaders’ leader or senior leadership when improved leadership skills would benefit relationships. These proactive measures play a critical role in a culture where all employees are respected and valued.

The following chart illustrates discipline issued to employees between 2018-2022. Summarized below are the disciplines issued for violations of SMUD’s Nondiscrimination, Anti-Harassment and Non-Retaliation Policy (AP 05.01.01) as well as discipline for misconduct/policy violations under SMUD’s Positive Discipline Policy (AP 05.02.09) including dishonesty, bullying, discourteous behavior, unprofessional conduct, driving policy violations, insubordination, conflicts of interest and unethical behavior. The below reporting does *not* include discipline related to safety incidents (e.g. preventable vehicle accidents), attendance (tardiness and/or absences) or work performance unless there was a conduct component covered by SMUD’s Code of Business Ethics & Employee Conduct, such as willful negligence or dishonesty.



The chart shown next indicates violations of SMUD’s Non-discrimination, Anti-Harassment and Non-Retaliation Policy (AP 05.01.01) as they relate to protected categories for FEO investigations that occurred in the past five years.



4. Challenges

Completing training and obtaining necessary documents can be a challenge for employees on any type of extended leave. Broad or anonymous complaints are sometimes filed without supporting and/or contact information to allow for follow-up and further investigation.

5. Recommendations

As reflected in this report, SMUD has achieved the goals set forth in SD-12 for maintaining the public trust and confidence in the integrity and ethical conduct of the Board and SMUD employees. The policies, guidelines, staff training and monitoring and reporting components have played a part in ensuring high ethical standards in all areas of conduct and in operations.

It is recommended the Board accept the monitoring report for Strategic Direction 12.

6. Appendices
N/A

RESOLUTION NO. 23-05-04

WHEREAS, in November 2022, SMUD issued Request for Proposal No. Doc374368116 (RFP) to solicit qualified firms to provide environmental and California Environmental Quality Act (CEQA) support services; and

WHEREAS, six proposals submitted in response to the RFP were evaluated; **NOW, THEREFORE**,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. As a result of such examination, **AECOM Technical Services, Inc., Ascent Environmental, Inc., Environmental Science Associates,** and **GEI Consultants, Inc.** are hereby determined and declared to be the four highest evaluated responsive proposers for environmental and California Environmental Quality Act (CEQA) support services.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of SMUD, to award contracts to **AECOM Technical Services, Inc., Ascent Environmental, Inc., Environmental Science Associates,** and **GEI Consultants, Inc.** for environmental and California Environmental Quality Act (CEQA) support services for a contract term of three years from June 1, 2023, to May 31, 2026, with one optional two-year extension for a total aggregate contract not-to-exceed amount of \$10,000,000.

Section 3. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the contracts that, in his prudent judgment: (a) further the primary purpose of the contracts; (b) are intended to provide a net benefit to SMUD; and (c) do not exceed the authorized contract amounts and applicable contingencies.

Approved: May 18, 2023

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

RESOLUTION NO. 23-05-05

WHEREAS, by Resolution No. 20-07-05, adopted on July 16, 2020, this Board declared a Climate Emergency, which, among other things, directed the Chief Executive Officer and General Manager to report on clear, actionable and measurable strategies and plans to reach SMUD's climate emergency goals of carbon neutrality by 2030 no later than March 31, 2021; and

WHEREAS, by Resolution No. 21-04-05, adopted on April 28, 2021, this Board accepted the SMUD **2030 Zero Carbon Plan** with clarifications, which created a flexible roadmap for SMUD to eliminate all its power supply carbon emissions by 2030; and

WHEREAS, SMUD and **Calpine Energy Services, L.P. (CES)**, a Delaware limited partnership and an affiliate of **Calpine Corporation (Calpine)** are parties to a Transaction Confirmation dated February 19, 2020, and a Transaction Confirmation dated December 21, 2021, pursuant to which **Calpine** makes available to SMUD and SMUD has the right to dispatch, up to 258 MW of energy and capacity from the **Sutter Energy Center (Facility)**, that is owned by **Sutter Energy Center, LLC (SEC)**, a Delaware limited liability company and also an affiliate of **Calpine**, through December 31, 2026; and

WHEREAS, pursuant to AB 1279, the State of California has directed the implementation of a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture and storage (CCS) technologies in California to complement emissions reductions and achieve the State of California's policy goals; and

WHEREAS, the **California Air Resources Board's (CARB)** Scoping Plan projects a need to retain all existing gas-fired generation to meet demand through 2045 and includes 16.7 million tons per year of existing fossil generation utilizing CCS by 2045 to achieve AB 1279's 85% reduction target; and

WHEREAS, there is substantial federal and state support for the deployment of CCS technologies, including retrofitting of existing natural gas-fired generation facilities with CCS technology; and

WHEREAS, on February 23, 2023, the **U.S. Department of Energy (DOE)** issued a **Funding Opportunity Announcement (FOA)** for up to \$1.7 billion for integrated CCS projects and additional federal and state grant opportunities will be made available to support CCS projects in the future; and

WHEREAS, under the **FOA**, the **DOE** will provide financial assistance through cooperative agreements at up to 50% federal cost share for up to six transformational commercial-scale, integrated CCS demonstration projects designed to further advance the deployment of technologies to capture, transport, and store CO₂ emissions, including up to two new or existing natural gas electric generation facilities; and

WHEREAS, **Calpine** plans to develop the **Sutter Decarbonization Project at SEC (CCS Project)**, which would include conversion of the existing natural gas plant to include CCS to be online on January 1, 2027, providing up to 400 MW and sequestering up to 1.5 million metric tons of greenhouse gas (GHG) per year, with expected capture at 95-98%; and

WHEREAS, a study conducted by the **Lawrence Livermore National Laboratory (LLNL)** concluded that the geology of the **SEC** site is excellent with the potential to store approximately 1,655 million tons of CO₂; and

WHEREAS, the **CCS Project** is particularly well-suited to the deployment of CCS technology, given its proximity to suitable geologic formations for effective sequestration, the availability of sufficient real property, and **Calpine's** ownership of suitable pipeline rights of way; and

WHEREAS, **Calpine** approached SMUD with an opportunity to partner with them on a grant application under which SMUD would be listed as the off-taker of energy from the **CCS Project**; and

WHEREAS, **Calpine** is seeking to work with SMUD on the development of the **CCS Project** and to negotiate commercial terms of a 12-year **Power Purchase Agreement** for the output of the **CCS Project** in furtherance of the **2030 Zero Carbon Plan** and on terms favorable to SMUD; and

WHEREAS, at the SMUD Board of Directors meeting on March 15, 2023, SMUD staff provided an overview of the opportunity to partner with

Calpine on the **CCS Project** including an overview of SMUD's **2030 Zero Carbon Plan**, the **CCS Project**, project fit and benefits towards achieving SMUD's plan including community benefits, and the public outreach process and schedule; and

WHEREAS, on May 2, 2023, SMUD held a public workshop on the proposed **CCS Project**, whereby, SMUD sent invitations to environmental, environmental justice groups, and individuals from SMUD's listservs, and posted on SMUD's social media channels and its dedicated web page; nineteen (19) members from the public attended the workshop; and

WHEREAS, the public workshop had presentations from **LLNL**, **Calpine**, technology experts (**ION** and **1PointFive**) and SMUD with a facilitated question-and-answer (Q&A) with more than a dozen questions submitted in advance, and there were five informational stations that fielded over 60 questions; and

WHEREAS, SMUD believes that partnering with **Calpine** as the off-taker of energy from the **CCS Project** may be an expeditious and cost-effective means of eliminating carbon emissions from its power supply, while also preserving a high level of reliability and the successful deployment of CCS technologies might also facilitate an earlier closure of less efficient thermal resources located in or near disadvantaged communities; **NOW, THEREFORE**,

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

Section 1. This Board approves SMUD's participation in the submittal of a grant application or applications by **Calpine Corporation (Calpine)** to the **U.S. Department of Energy** or other federal and state agencies for the **Sutter Decarbonization Project (CCS Project)** and authorizes the Chief Executive Officer and General Manager, or his designee, in the name of Sacramento Municipal Utility District, to execute all grant documents in support of securing grant funds.

Section 2. The Chief Executive Officer and General Manager, or his designee, is further authorized, on behalf of SMUD, to sign a **Memorandum of Agreement**, substantially in the form attached, with **Calpine** to negotiate

commercial terms of a **Power Purchase Agreement** for the proposed **CCS**
Project.

Approved: May 18, 2023

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

MEMORANDUM OF AGREEMENT

This Memorandum of Agreement (“**Memorandum**”), dated as of May __, 2023, is entered into by and between the Sacramento Municipal Utility District, a political subdivision of the State of California, with its principal offices at 6201 S Street, Sacramento, California 95817 (“**SMUD**”), and Calpine Corporation, a Delaware corporation, with its principal offices at 717 Texas Avenue, Suite 1000, Houston, Texas 77002 (“**Calpine**”). SMUD and Calpine are referred to herein individually as a “**Party**” and collectively as the “**Parties**”.

RECITALS

A. SMUD and Calpine Energy Services, L.P., a Delaware limited partnership and an affiliate of Calpine (“**CES**”) are parties to that certain Transaction Confirmation dated February 19, 2020 and that certain Transaction Confirmation dated December 21, 2021 (collectively, the “**Existing Transactions**”), pursuant to which Calpine makes available to SMUD and SMUD has the right to dispatch, up to 258 MW of energy and capacity from the Sutter Energy Center (the “**Facility**”), that is owned by Sutter Energy Center, LLC, a Delaware limited liability company and also an affiliate of Calpine (“**SEC**”), through December 31, 2026.

B. SMUD has adopted its 2030 Zero Carbon Plan which sets forth a number of procurement and resource-related goals with the objective of eliminating carbon emissions from its power supply by 2030. In connection with its execution of the objectives set forth in the 2030 Zero Carbon Plan, SMUD believes that retrofitting existing natural gas generation facilities with carbon capture and sequestration (“**CCS**”) technologies may be an expeditious and cost effective means of eliminating carbon emissions from its power supply, while also preserving a high level of reliability. The successful deployment of CCS technologies at the Facility might also facilitate an earlier closure of less efficient thermal resources located in or near disadvantaged communities.

C. Pursuant to AB 1279, the State of California has directed the implementation of a variety of policies and strategies that enable carbon dioxide removal solutions and CCS technologies in California to complement emissions reductions and achieve the State of California’s policy goals.

D. Calpine is actively pursuing the use and deployment of CCS technologies and is currently developing retrofits at a number of its natural gas-fired generation facilities throughout the country, including the Facility. The Facility is particularly well suited to the deployment of CCS technology, given its proximity to suitable geologic formations for effective sequestration, the availability of sufficient real property, and Calpine’s ownership of suitable pipeline rights of way.

E. The use and deployment of CCS at the Facility is critical for meeting California’s ambitious climate goals while ensuring the availability of reliable natural gas-fired electricity. CCUS is one of the only technologies that can enable firm, dispatchable, non-duration-limited low-carbon generation to backstop the reliability of the grid. The California Air Resources Board’s (“**CARB**”) Scoping Plan projects a need to retain all existing gas-fired generation to meet demand through 2045 and includes 16.7 million tons per year of existing fossil generation utilizing CCUS by 2045 to achieve AB 1279’s 85% reduction target.

F. Calpine has applied to the California Energy Commission (“CEC”) to modify the CEC permit for the Facility to enable the use of CCS technology. Calpine has also engaged an engineering, procurement and construction (EPC) contractor to perform the front end engineering design (“FEED”) study for the addition of a carbon capture facility to the Facility, has procured substantially all of the real estate rights necessary to transport the captured carbon dioxide to a carbon sequestration facility being developed by a third party, and [has entered into a memorandum of understanding with such third party] for the sequestration of all carbon dioxide captured from the Facility in compliance with all federal and state requirements.

G. There is substantial federal support for the deployment of CCS technologies, including retrofitting of existing natural gas-fired generation facilities, such as the Facility, with CCS technology. Section 45Q of the Internal Revenue Code provides for a tax credit of up to \$85 per ton of sequestered carbon dioxide for qualified projects that begin construction before January 1, 2033. The party that is developing the carbon sequestration facility has received a grant from the Department of Energy (“DOE”) under the Infrastructure Investment and Jobs Act for CarbonSAFE Phase II funding which, together with other committed funds, will pay a substantial portion of the costs necessary to develop the carbon sequestration facility. Calpine is also applying to DOE for federal funding for the installation of CCS technology at the Facility and believes that the Facility is an excellent candidate for this funding because of, among other things, the proximity of the carbon sequestration facility.

H. Pursuant to a Memorandum of Understanding dated September 10, 2021 (the “MOU”) between the Parties, the Parties have been investigating the technical and economic feasibility of entering into a transaction pursuant to which Calpine (or its affiliates) would retrofit the Facility with CCS technology and arrange for the sequestration of the captured carbon dioxide, so that the Facility is capable of providing capacity and energy meeting the requirements of SMUD’s 2030 Zero Carbon Plan (“**Zero Carbon Capacity and Energy**”), and SMUD would purchase the Zero Carbon Capacity and Energy from the retrofitted Facility. The Parties have concluded that such an arrangement is technically and economically feasible and wish to proceed to the execution of definitive agreements, subject only to the satisfaction of certain conditions precedent set forth in this Memorandum.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, the Parties agree as follows:

1. Intent to Enter into PPA. The Parties agree that it is their mutual intent, subject to satisfaction or waiver of the conditions set forth in Section 2 of this Memorandum, and subject to further clarification by the Parties around certain material commercial terms not currently available at the time of the execution of this Memorandum, to enter into a definitive transaction confirmation for the purchase and sale of Zero Carbon Capacity and Energy from the Facility for a minimum of 12 years (Transaction Confirmation). Each Party hereby authorizes its duly authorized representatives to, upon satisfaction of the conditions set forth herein and in Section 2, to enter into negotiations for such Transaction Confirmation in accordance with Section 3 of this Memorandum.

2. Conditions to Entry into PPA. Each Party's obligation to enter into the Transaction Confirmation is subject to the satisfaction or waiver by the Party benefited, in such Party's reasonable discretion, of the following conditions. The Parties will cooperate and work together in good faith to satisfy these conditions as soon as reasonably practical. All conditions shall be deemed to benefit both Parties unless otherwise stated.

a. Calpine or its affiliates have received all federal, state and local governmental authorizations and permits necessary to retrofit the Facility and operate it to produce Zero Carbon Capacity and Energy, including modifications of the CEC permit and air permit for the Facility and compliance with the National Environmental Policy Act ("NEPA") and the California Environmental Quality Action ("CEQA").

b. All federal, state and local governmental authorizations and permits necessary for the construction and operation of a carbon sequestration facility capable of sequestering the carbon dioxide emitted by the Facility have been issued, and Calpine or its affiliates have entered into an agreement with the owner of such facility to accept the carbon dioxide expected to be produced by the Facility under the Transaction Confirmation for at least the full term of the Transaction Confirmation and to sequester such carbon dioxide in accordance with applicable federal and state requirements.

c. The Parties are satisfied that Calpine or an affiliate has entered into or will be able to enter into an EPC contract to modify the Facility by the addition of a carbon capture facility that, when operated in conjunction with the carbon sequestration facility described above, can reasonably be expected to produce Zero Carbon Capacity and Energy as provided in the Transaction Confirmation.

d. SMUD is satisfied that the Transaction Confirmation, as completed and/or modified by the Parties, is consistent with its Integrated Resources Plan and its 2030 Zero Carbon Plan, satisfies SMUD's reliability needs, and the pricing and other terms are competitive with other base-load resources available to SMUD to provide Zero Carbon Capacity and Energy.

3. Definitive Agreement. The Parties will use all commercially reasonable efforts to enter into the definitive Transaction Confirmation within [thirty (30)] days after the conditions set forth in Sections 2(a) through 2(d) have been satisfied or waived. This Memorandum only constitutes a statement of the current mutual intentions of the Parties and does not create any binding legal obligations on the part of either Party, and may not be relied upon by either Party as the basis for any claim, estoppel or purported agreement. No Party shall be obligated to proceed with the transactions contemplated by the Memorandum unless and until a definitive Transaction Confirmation has been (i) approved by the SMUD Board of Directors, and (ii) executed and delivered by the Parties, and then only to the extent provided in such Transaction Confirmation.

4. Term. This Memorandum will terminate on the earliest of: (i) the execution of a definitive Transaction Confirmation by the Parties, or (ii) the agreement of the Parties to terminate this Memorandum.

5. Confidentiality. This Memorandum and all information delivered or disclosed pursuant to this Memorandum or in connection with the activities described herein are subject to

the terms and conditions of that certain Confidentiality and Non-Disclosure Agreement dated August 5, 2021 between the Parties.

6. Public Statements. No Party shall issue any announcements, press releases or public statements regarding the existence of this Memorandum or the shared purpose or activities herein without the approval of the other Party; provided that a Party may make such public disclosures or filings as required by law.

7. Assignment. Neither Party may assign this Memorandum or its rights and obligations hereunder without the prior written consent of the other Party in its sole discretion, provided, however, that Calpine may assign or delegate this Memorandum and/or its rights and obligations hereunder, in whole or in part, to one or more wholly-owned affiliates and SMUD may assign or delegate this Memorandum and/or its rights and obligations hereunder, in whole or in part, to the Balancing Authority of Northern California. Any purported assignment not in accordance with this Section 7 shall be null and void and of no force or effect. Subject to the foregoing, the binding provisions of this MOU shall bind and benefit the Parties and their successors and assigns.

8. Relationship of the Parties. This Memorandum is not intended to create, nor shall it be construed to create, any partnership, agency or joint venture between the Parties or to render either Party liable for any debts or obligations of the other Party, and the Parties represent and warrant to each other that no fact or relationship exists that would expressly or impliedly create any such partnership, agency or joint venture.

9. Fees and Expenses. Each Party will be solely responsible for its own legal and professional fees and expenses costs (including without limitation legal, engineering, accounting and other professional fees) incurred in connection with the negotiation and preparation of the Memorandum and the Transaction Confirmation and the performance of its obligations hereunder.

10. Governing Law. This Memorandum shall be governed by and interpreted in accordance with the laws of the State of California without reference to principles of conflict of laws.

11. Counterparts. This Memorandum may be executed in one or more counterparts, each of which will be deemed to be an original copy and all of which, when taken together, will be deemed to constitute one and the same document, and will be effective when counterparts have been executed by each of the Parties and delivered. A manual or electronic signature been transmitted electronically will constitute an original for all purposes. The delivery of copies of this Memorandum, including executed signature pages, by electronic transmission will constitute effective delivery of this Memorandum for all purposes.

IN WITNESS WHEREOF, the Parties have executed this Memorandum as of the day and year first above written.

SACRAMENTO MUNICIPAL UTILITY DISTRICT CALPINE CORPORATION

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

President Sanborn then turned to Discussion Calendar Item 10, to approve the issuance of SMUD 2023 Revenue Refunding Bonds, SMUD 2023 Subordinated Electric Revenue Refunding Bonds, SMUD 2023 Electric Revenue Bonds and/or SMUD 2023 Subordinated Electric Revenue Bonds, authorize the distribution of the Preliminary Official Statement, and authorize the Chief Executive Officer and General Manager to execute documents necessary to complete the refunding transaction or transactions, including the Bond Purchase Agreement or Agreements and Credit Support Agreements.

Russell Mills, Director of Treasury & Treasurer gave a presentation on Item 10. A copy of the slides used in his presentation is attached to these minutes.

No public comment was forthcoming on Discussion Calendar Item 10.

After some discussion, Director Rose moved for approval of Discussion Calendar Item 10, Director Bui-Thompson seconded, and Resolution Nos. 23-05-06 through 23-05-11 were unanimously approved.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. 23-05-06

SIXTY-SIXTH SUPPLEMENTAL RESOLUTION
AUTHORIZING THE ISSUANCE OF ONE OR MORE SERIES OR SUBSERIES OF
ELECTRIC REVENUE BONDS

(Supplemental To Resolution No. 6649
Adopted January 7, 1971)

Adopted: May 18, 2023

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RESOLUTION NO. 23-05-06

**Sixty-Sixth Supplemental Resolution
(Supplemental To Resolution No. 6649,
Adopted January 7, 1971)**

**Authorizing the Issuance of One or More Series or Subseries of
Electric Revenue Bonds**

WHEREAS, on January 7, 1971, the Board of Directors of the Sacramento Municipal Utility District (the “Board”) adopted its Resolution No. 6649 providing for the issuance of the Sacramento Municipal Utility District’s Electric Revenue Bonds (as supplemented and amended, herein called the “Master Resolution”);

WHEREAS, the Master Resolution provides that the Sacramento Municipal Utility District (the “District”) may issue bonds from time to time as the issuance thereof is authorized by the Board by a supplemental resolution;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Master Resolution and Article 6a of Chapter 6 of the Municipal Utility District Act (California Public Utilities Code Sections 12850 et seq.) and the Revenue Bond Law of 1941 (California Government Code Section 54300 et seq.) for the purpose of financing improvements and additions to the District’s Electric System;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Master Resolution and California Government Code Section 53580 et seq. for the purpose of refunding revenue bonds, including the District’s commercial paper notes (the “Notes”);

WHEREAS, the District has determined to issue its 2023 Bonds (as defined herein), at one or more times and in one or more series or subseries (as specified in the hereinafter defined Sales Certificates) and in an aggregate principal amount not to exceed the principal amount described herein, to (i) refund certain series and maturities of the District’s Electric Revenue Bonds and/or Subordinated Electric Revenue Bonds (to be identified in one or more of the Sales Certificates) (the “Refunded Bonds”), (ii) to the extent specified in one or more of the Sales Certificates, finance and refinance improvements and additions to the District’s Electric System, including through the payment of all or a portion of the District’s outstanding Notes, (iii) pay costs of issuance (to the extent specified in the Sales Certificates), (iv) fund one or more termination payments for the termination of one or more interest rate swap agreements relating to the issuance of the 2023 Bonds or any portion thereof (to the extent specified in the Sales Certificates), and (v) make deposits to the Reserve Fund or a separate debt service reserve fund (as and if specified in one or more of the Sales Certificates);

WHEREAS, the District anticipates that, if necessary or desirable in the judgment of the Treasurer, it may seek commitments from one or more bond insurers (each, a “Bond Insurer”) to issue one or more financial guaranty policies with respect to all or part of the 2023 Bonds, each of which commitments is expected to be conditioned on certain terms and

conditions to be set forth in one or more insurance agreements among the applicable Bond Insurer, the Trustee and the District (each, an “Insurance Agreement”);

WHEREAS, Section 8.03 of the Master Resolution provides that the District may amend the Master Resolution by a supplemental resolution to be effective when there shall have been filed with the District or the Trustee the written consents of the holders and registered owners of 60% of the District’s Electric Revenue Bonds then outstanding; and

WHEREAS, the District has drafted proposed amendments to the Master Resolution which are described in Section 145.01 of this Sixty-Sixth Supplemental Resolution, and the District intends to issue the 2023 Bonds with the provision that each holder of the 2023 Bonds by purchasing the 2023 Bonds is deemed to have consented to the proposed amendments, all as more fully described herein;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Sacramento Municipal Utility District, as follows:

ARTICLE CXLIII

2023 BONDS

Section 143.01 Authorization and Terms of 2023 Bonds.

(a) The Board hereby authorizes the issuance of revenue bonds of the District for the purpose of (i) refunding outstanding revenue bonds of the District, and/or (ii) financing and refinancing improvements and additions to the District’s Electric System, including through the payment of all or a portion of the District’s outstanding Notes, in each case in accordance with the Master Resolution and the Sales Certificates. The authorization provided in this paragraph to issue revenue bonds shall include, in addition to the purposes mentioned above, the authorization to issue such bonds for the allocable portion of any original issue discount, underwriting discount, bond insurance premiums, costs of issuance, interest rate swap termination payments, deposits to the Reserve Fund or a separate debt service reserve fund, and other miscellaneous costs necessary or desirable, in the judgment of the Treasurer, to be financed by such bonds.

(b) One or more series of bonds to be issued under the Master Resolution are hereby created. Said bonds shall be known as the “Sacramento Municipal Utility District Electric Revenue Bonds, 2023 Series []”, with such letter or other identifying series or subseries designations as are specified in the Sales Certificates (herein collectively called the “2023 Bonds”). The 2023 Bonds may be sold and issued at one or more times and in one or more series or subseries (as specified in the hereinafter defined Sales Certificates) only in fully registered form. The 2023 Bonds shall be initially registered in the name of “Cede & Co.,” as nominee of The Depository Trust Company (“DTC”) and shall be numbered in consecutive order in such manner as is determined by the Trustee. Registered ownership of the 2023 Bonds, or any portion thereof, may not thereafter be transferred except as set forth in Section 143.08.

(c) The 2023 Bonds shall be issued in such aggregate principal amount which, together with the aggregate principal amount, if any, of the District’s Subordinated Electric

Revenue Refunding Bonds, 2023 Series C, Subordinated Electric Revenue Bonds, 2023 Series D, Subordinated Electric Revenue Bonds, 2023 Series E, and Subordinated Electric Revenue Refunding Bonds, 2023 Series F, shall not exceed \$630,000,000, shall be dated, shall bear interest at such rate or rates (payable on such dates), not exceeding the maximum rate permitted by law, shall mature and become payable as to principal on such maturity dates in the amounts and subject to such mandatory sinking fund payments on such mandatory sinking fund payment dates, if any, all as set forth in one or more Sales Certificates to be executed and delivered concurrently with the sale of the applicable series or subseries of 2023 Bonds (collectively, the “Sales Certificates”). If all or any portion of the 2023 Bonds are to bear interest at variable rates of interest, not exceeding the maximum rate permitted by law, the manner of determining such variable rates of interest shall be as set forth in the applicable Sales Certificate. In addition to the provisions required pursuant to the terms of this Resolution to be specified in the Sales Certificates, the Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District, or the Chief Financial Officer of the District or the designee of any of them (each an “Authorized Officer”), on behalf of the District, may set forth in the Sales Certificates such provisions, in a form approved by its bond counsel and the District’s counsel, as such Authorized Officer may deem necessary or desirable and consistent with the purpose of this Resolution, including provisions (i) adding additional covenants and agreements to be observed by the District, (ii) curing, correcting, amending or supplementing any ambiguous, defective or ineffective provision contained in the Resolution, or (iii) amending or supplementing any provision contained herein to the extent necessary to obtain one or more bond insurance policies, to obtain a rating on any of the 2023 Bonds, or to provide for the issuance of any of the 2023 Bonds if, in the judgment of any Authorized Officer, after consulting with its municipal advisor, bond counsel and District counsel, such insurance, rating or provision is reasonable. Any Authorized Officer, acting alone, is hereby authorized and instructed to execute and deliver the Sales Certificates and, upon execution and delivery thereof, the Sales Certificates shall be incorporated herein and in the Master Resolution by reference. The execution and delivery of the Sales Certificates shall be conclusive evidence that, where any judgment or determination of reasonableness is required to be made by the person signing said Sales Certificates, such judgment or determination has been made.

(d) Notwithstanding the foregoing, no Sales Certificate shall specify (i) a true interest cost on the applicable 2023 Bonds bearing interest at fixed rates of interest in excess of 4.00%; or (ii) a maturity date for any 2023 Bond later than forty (40) years after the dated date of such 2023 Bond.

(e) Interest on the 2023 Bonds shall be calculated on the basis and be payable on the dates set forth in the Sales Certificates, to the registered owners thereof as of the record dates specified in the Sales Certificates.

(f) Pursuant to Section 5.04 of the Master Resolution, the Sales Certificates shall specify whether the 2023 Bonds or any series or subseries thereof are to be secured by (A) the Reserve Fund, (B) a separate debt service reserve fund, or (C) neither (A) nor (B). If the Sales Certificates provide that the 2023 Bonds or any series or subseries thereof are to be secured by a separate debt service reserve fund, such Sales Certificates may provide for the creation of such funds or accounts in furtherance thereof as may be deemed appropriate in the Treasurer’s

discretion, and such funds or accounts shall be held in trust by the District or the Trustee, as specified in the Sales Certificates, solely for the benefit of the Holders of the 2023 Bonds or applicable series or subseries thereof, and is hereby pledged solely to the payment of the 2023 Bonds or applicable series or subseries thereof, subject to the application thereof for the purposes set forth in the Sales Certificates. If a separate debt service reserve fund is so created, the Sales Certificates may further specify such other terms and provision relating thereto, as in the Treasurer's discretion are appropriate, including, without implied limitation, the minimum balance required to be maintained on deposit therein, the purposes for which moneys on deposit therein may or shall be applied, the terms on which any deficiencies therein are to be replenished, additional limitations concerning investment of moneys therein and the valuation thereof, and provisions concerning the deposit of credit instruments in lieu of cash therein.

(g) The Sales Certificates shall designate the series, amounts and maturity or sinking fund payment dates of the Refunded Bonds.

Section 143.02 Redemption of 2023 Bonds. The 2023 Bonds or any series or subseries thereof shall be subject to redemption on the terms set forth below and in the Sales Certificates (which may specify that some or all of the 2023 Bonds will not be subject to redemption).

(a) Notice of Redemption. If any of the 2023 Bonds are subject to redemption, then in addition to the notice of redemption required to be given pursuant to Article IV of the Master Resolution, the Trustee shall mail, by first class mail, postage prepaid, notice of redemption of any 2023 Bond to the Securities Depositories. Failure of the Trustee to give notice of redemption to any Securities Depository, or any defect therein, however, shall not affect the sufficiency of the proceedings of redemption with respect to any 2023 Bond. For purposes of this paragraph, the following term shall have the following meaning:

“Securities Depositories” means DTC, 55 Water Street, 50th Floor, New York, N.Y. 10041-0099 Attn. Call Notification Department, Fax (212) 855-7232; or, in accordance with the current guidelines of the Securities and Exchange Commission, to such other address and/or such other securities depositories as the District may designate to the Trustee in writing.

Notwithstanding any contrary provision of Article IV of the Master Resolution or this Sixty-Sixth Supplemental Resolution, (1) publication of any notice of redemption shall not be required with respect to the 2023 Bonds, so long as such 2023 Bonds are in full book-entry form, (2) any notice of redemption of the 2023 Bonds shall be mailed not less than twenty (20) nor more than sixty (60) days prior to the redemption date, and (3) any notice of optional redemption of 2023 Bonds may be made conditional on the receipt of money or any other condition.

(b) Redemption Otherwise Subject to Article IV. Except as in this Section and in the Sales Certificates otherwise provided, the redemption of 2023 Bonds shall be subject to the provisions of Article IV of the Master Resolution.

Section 143.03 Deposits to Interest Fund and Principal Account.

Notwithstanding any contrary provision of the Resolution, the Treasurer, out of Net Revenues received by the District, shall set aside in the Interest Fund and the Principal Account, respectively, such amounts as may be required so that an amount equal to the amount of principal and/or interest becoming due and payable on the 2023 Bonds on each interest payment date and principal payment date is on deposit in the Interest Fund and the Principal Account, respectively, at such time on or prior to such interest payment date or principal payment date as shall be specified in the Sales Certificates.

Section 143.04 2023 Sinking Fund.

(a) An account is hereby established within the Sinking Fund created by Section 5.02 of the Master Resolution to be designated the “2023 Sinking Fund.” On or before each minimum sinking fund payment date for any 2023 Bonds set forth in the Sales Certificates, the Treasurer shall deposit in the 2023 Sinking Fund, out of Net Revenues received by the District, such amounts as may be required to cause the balance therein to be equal to the amount of the minimum sinking fund payment due and payable on the 2023 Bonds on such minimum sinking fund payment date as set forth in the Sales Certificates.

(b) The District shall apply all such minimum sinking fund payments, as rapidly as practicable, to the purchase of 2023 Bonds at public or private sale, as and when and at such prices (including brokerage and other expenses, but excluding accrued interest, which is payable from the Interest Fund) as the District may in its discretion determine.

(c) If on the first day of the month preceding the month in which a minimum sinking fund payment date occurs, as set forth in the Sales Certificates, the moneys in the 2023 Sinking Fund equal or exceed \$25,000, such moneys shall be applied by the District to the redemption on such minimum sinking fund payment date of as many 2023 Bonds as such moneys in the 2023 Sinking Fund shall suffice to redeem at a redemption price equal to the principal amount thereof (except that accrued interest on such 2023 Bonds so called for redemption shall be paid from the Interest Fund). All 2023 Bonds purchased or redeemed under the provisions of this Section shall be delivered to, and canceled by, the Trustee and shall not be reissued.

(d) No application of any moneys to the retirement of 2023 Bonds shall operate to impair or affect the obligation of the District to make minimum sinking fund payments for 2023 Bonds in the amounts and at the times provided in this Section; however, the District shall not be deemed to be in default with respect to any 2023 Bonds minimum sinking fund payment for any minimum sinking fund payment date if at all times prior to such minimum sinking fund payment date the District shall have fixed rates and charges as required by Section 6.08 of the Master Resolution, and if at such minimum sinking fund payment date the aggregate principal amount of all 2023 Bonds theretofore purchased or redeemed through the operation of the 2023 Sinking Fund or otherwise (together with any moneys then in the 2023 Sinking Fund) equals or exceeds the aggregate amount of minimum sinking fund payments for 2023 Bonds then and theretofore required to be made pursuant to this Section.

(e) Any moneys remaining in the 2023 Sinking Fund after all 2023 Bonds have been retired shall be returned to the District for any lawful District use.

Section 143.05 Form of 2023 Bonds. The 2023 Bonds, and the certificate of authentication and registration to be executed thereon, shall be in substantially the form set forth as Appendix A to this Sixty-Sixth Supplemental Resolution. The series or subseries designations, numbers, maturity dates, interest rates, method or methods of determining interest rates, redemption provisions and other terms of the 2023 Bonds shall be inserted therein in conformity with the Sales Certificates.

Section 143.06 Issuance of 2023 Bonds.

(a) At any time after the adoption of this Sixty-Sixth Supplemental Resolution and the execution and delivery of the applicable Sales Certificate, the District may execute and deliver 2023 Bonds in the aggregate principal amount set forth in the applicable Sales Certificate, but not to exceed the aggregate principal amount described in Section 143.01(c).

(b) The Trustee shall authenticate and deliver the 2023 Bonds upon written order of the District.

(c) The proceeds of the sale of the 2023 Bonds shall be set aside and applied by the Treasurer as set forth in the Sales Certificates.

Section 143.07 Refunding of 2023 Bonds. If Refunding Bonds are issued for the purpose of refunding 2023 Bonds, then, in addition to any other provisions of Section 3.05 of the Master Resolution, the District is authorized to apply proceeds of the sale of such Refunding Bonds to the payment of the purchase price of direct non-callable obligations of the United States of America (“Treasury Obligations”) to be held by the Trustee to insure the payment or retirement at or before maturity of all or a portion of the outstanding 2023 Bonds. Upon deposit with the Trustee, in trust, of money or Treasury Obligations (including, but not limited to, direct obligations of the United States of America issued in book-entry form on the books of the Department of the Treasury of the United States of America), or any combination thereof, sufficient, together with the interest to accrue on any such Treasury Obligations, to pay or redeem all or a portion of 2023 Bonds then outstanding at or before their maturity date, provided that, in the case of 2023 Bonds which are to be redeemed prior to maturity, notice of such redemption shall have been given as provided in Article IV of the Master Resolution or provision satisfactory to the Trustee shall have been made for the giving of such notice, all liability of the District in respect of such 2023 Bonds shall cease, determine and be completely discharged, and the holders thereof shall thereafter be entitled only to payment by the District out of the money and Treasury Obligations deposited with the Trustee as aforesaid for their payment, subject, however, to the provisions of Section 10.03 of the Master Resolution. If the liability of the District shall cease and determine with respect to all or a portion of the 2023 Bonds as above provided, then said 2023 Bonds shall not be considered to be outstanding Bonds for any purpose of the Master Resolution or of this Sixty-Sixth Supplemental Resolution.

Section 143.08 Use of Depository. Notwithstanding any provision of the Master Resolution or this Sixty-Sixth Supplemental Resolution to the contrary:

(a) The 2023 Bonds shall be initially issued as provided in Section 143.01. Registered ownership of the 2023 Bonds, or any portion thereof, may not thereafter be transferred except:

(i) To any successor of DTC or its nominee, or to any substitute depository designated pursuant to clause (ii) of this subsection (a) (“substitute depository”); provided that any successor of DTC or substitute depository shall be qualified under any applicable laws to provide the service proposed to be provided by it;

(ii) To any substitute depository not objected to by the Trustee, upon (1) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository or (2) a determination by the District that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; provided that any such substitute depository shall be qualified under any applicable laws to provide the services proposed to be provided by it; or

(iii) To any person as provided below, upon (1) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository; provided that no substitute depository which is not objected to by the Trustee can be obtained or (2) a determination by the District that it is in the best interests of the District to remove DTC or its successor (or any substitute depository or its successor) from its functions as depository.

(b) In the case of any transfer pursuant to clause (i) or clause (ii) of Section 140.08(a) hereof, upon receipt of all outstanding 2023 Bonds by the Trustee, together with a Certificate of the District to the Trustee, a single new 2023 Bond shall be executed and delivered for each maturity of each series of 2023 Bonds then outstanding registered in the name of such successor or such substitute depository, or their nominees, as the case may be, all as specified in such Certificate of the District. In the case of any transfer pursuant to clause (iii) of Section 143.08(a) hereof, upon receipt of all outstanding 2023 Bonds by the Trustee together with a Certificate of the District to the Trustee, new 2023 Bonds shall be executed, authenticated and delivered in such denominations and registered in the names of such persons as are requested in such a Certificate of the District, subject to the limitations of Section 143.08(a) hereof, provided the Trustee shall not be required to deliver such new 2023 Bonds within a period less than 60 days from the date of receipt of such a Certificate of the District. Subsequent to any transfer pursuant to clause (iii) of Section 143.08(a) hereof, the 2023 Bonds shall be transferred as provided in Article II of the Master Resolution.

(c) In the case of partial redemption or refunding of the 2023 Bonds of a series evidencing all or a portion of the principal maturing in a particular year, DTC shall make an appropriate notation on such 2023 Bonds indicating the date and amounts of such reduction in principal. The Trustee shall incur no liability for the failure or any error by DTC in making such notation and the records of the Trustee shall be determinative of the outstanding principal amount of 2023 Bonds.

(d) The District and the Trustee shall be entitled to treat the person in whose name any 2023 Bond is registered as the Bondholder thereof for all purposes of the Master

Resolution and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the District; and the District and the Trustee shall have no responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with, any beneficial owners of the 2023 Bonds. Neither the District nor the Trustee will have any responsibility or obligations, legal or otherwise, to the beneficial owners or to any other party including DTC or its successor (or substitute depository or its successor), except for the holder of any 2023 Bond.

(e) So long as the outstanding 2023 Bonds are registered in the name of Cede & Co. or its registered assigns, the District and the Trustee (to the extent funds are provided to it by the District) shall cooperate with Cede & Co., as sole registered Bondholder, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2023 Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made immediately available on the date they are due.

Section 143.09 Tax Covenants.

(a) The District shall at all times do and perform all acts and things permitted by law which are necessary or desirable in order to assure that interest paid on the 2023 Bonds (or any of them) will be excluded from gross income for federal income tax purposes and shall take no action that would result in such interest not being excluded from gross income for federal income tax purposes. Without limiting the generality of the foregoing, the District agrees to comply with the provisions of each Tax Certificate of the District, dated the date of issuance of the applicable 2023 Bonds, as amended from time to time in accordance with its terms (collectively, the “Tax Certificate”). This covenant shall survive payment in full or defeasance of the 2023 Bonds.

(b) Without limiting the generality of the foregoing, the District agrees that there shall be paid from time to time all amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Internal Revenue Code of 1986 (the “Code”) and any temporary, proposed or final United States Treasury Regulations as may be applicable to the 2023 Bonds from time to time (the “Rebate Requirement”). The District specifically covenants to pay or cause to be paid the Rebate Requirement as provided in the Tax Certificate to the United States of America from any Net Revenues lawfully available to the District. This covenant shall survive payment in full or defeasance of the 2023 Bonds. Capitalized terms in this Section not otherwise defined in the Master Resolution or this Sixty-Sixth Supplemental Resolution shall have the meanings ascribed to them in the Tax Certificate.

(c) Notwithstanding any provision of this Section, if the District shall obtain an opinion of counsel of recognized national standing in the field of obligations the interest on which is excluded from gross income for purposes of federal income taxation to the effect that any specified action required under this Section is no longer required, or to the effect that some different action is required, to maintain the exclusion from gross income of the interest on the 2023 Bonds under Section 103 of the Code, the District may rely conclusively on such opinion in complying with the provisions hereof, and the agreements and covenants hereunder shall be deemed to be modified to that extent without the necessity of an amendment of the Master

Resolution or this Sixty-Sixth Supplemental Resolution or the consent at any time of the Bondholders.

(d) This Section 143.09 shall be inapplicable to the 2023 Bonds, if any, issued bearing interest included in gross income for federal income tax purposes, as set forth in the applicable Sales Certificate.

Section 143.10 Terms of 2023 Bonds Subject to the Master Resolution.

(a) Except as in this Sixty-Sixth Supplemental Resolution expressly provided, every term and condition contained in the Master Resolution shall apply to this Sixty-Sixth Supplemental Resolution and to the 2023 Bonds with the same force and effect as if the same were herein set forth at length, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Sixty-Sixth Supplemental Resolution.

(b) This Sixty-Sixth Supplemental Resolution and all the terms and provisions herein contained shall form part of the Master Resolution as fully and with the same effect as if all such terms and provisions had been set forth in the Master Resolution. The Master Resolution is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended hereby.

Section 143.11 Continuing Disclosure. The District hereby covenants and agrees that it will comply with and carry out all of the provisions of each Continuing Disclosure Agreement dated the date of issuance of the applicable 2023 Bonds (collectively, the “Continuing Disclosure Agreement”). Notwithstanding any other provision of the Master Resolution or this Sixty-Sixth Supplemental Resolution, failure of the District or the Trustee to comply with the Continuing Disclosure Agreement shall not be considered an Event of Default; however, the Trustee shall, at the written request of any Participating Underwriter (as defined in the Continuing Disclosure Agreement) or the Holders of at least 25% aggregate principal amount of outstanding 2023 Bonds upon receipt of indemnity satisfactory to the Trustee or any Holder of 2023 Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Section. For purposes of this Section, “Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2023 Bonds (including persons holding 2023 Bonds through nominees, depositories or other intermediaries).

ARTICLE CXLIV

INSURANCE PROVISIONS

Section 144.01 Insurance Agreements. Each Insurance Agreement, if any, is hereby incorporated in this Sixty-Sixth Supplemental Resolution by this reference, and the District covenants and agrees to comply with the terms and conditions thereof. The District further declares, covenants and agrees that the terms and conditions of each Insurance Agreement, if any, shall govern, with respect to the applicable 2023 Bonds, the rights and responsibilities of the District, the Trustee, the applicable Bond Insurer and the holders of the

applicable 2023 Bonds, to the extent such terms and conditions may be inconsistent with any other provision of the Master Resolution, as amended and supplemented, including as supplemented by this Sixty-Sixth Supplemental Resolution.

ARTICLE CXLV

AMENDMENT OF MASTER RESOLUTION

Section 145.01 Amendment of Master Resolution. The District intends to amend the Master Resolution substantially in the form of Appendix B to this Sixty-Sixth Supplemental Resolution (the “Proposed Amendments”). The purchasers of the 2023 Bonds, by virtue of their purchase of the 2023 Bonds, have consented to the Proposed Amendments. Pursuant to Section 8.03 of the Master Resolution, the Proposed Amendments shall become effective when the written consents of the holders and registered owners of 60% of the Bonds then outstanding have been filed with the District or the Trustee.

Approved: May 18, 2023

INTRODUCED: DIRECTOR ROSE				
SECONDED: DIRECTOR BUI-THOMPSON				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

APPENDIX A

FORM OF BOND

No. R- _____

\$ _____

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
ELECTRIC REVENUE [REFUNDING] BOND
2023 SERIES []**

Maturity

Interest Per Annum

Date

CUSIP

REGISTERED OWNER: CEDE & CO.

PRINCIPAL AMOUNT:

SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district duly organized and existing under and pursuant to the laws of the State of California (hereinafter called the "District"), for value received, hereby promises to pay (but only out of the Net Revenues hereinafter referred to) to the registered owner named above or registered assigns, on the maturity date specified above, the principal sum specified above together with interest thereon from the date of initial delivery hereof, until the principal hereof shall have been paid, at the interest rate per annum specified above, payable on February 15 and August 15 of each year, commencing [August] 15, 20[23]. Interest hereon is payable in lawful money of the United States of America by check or draft mailed on each interest payment date to the registered owner as of the first day of the month (whether or not a business day) in which an interest payment date occurs. Interest hereon shall be calculated on the basis of a 360-day year consisting of twelve 30-day months. At the option of the owners of \$1,000,000 or more in aggregate principal amount of Bonds of this series, interest hereon is also payable in lawful money of the United States of America by wire transfer to such address as has been furnished to the Trustee in writing by the registered owner hereof at least 15 days prior to the interest payment date for which such payment by wire transfer is requested. The principal hereof is payable at the designated corporate trust office of U.S. Bank Trust Company, National Association, the Trustee, in lawful money of the United States of America.

This Bond is one of a duly authorized issue of Sacramento Municipal Utility District Electric Revenue Bonds (hereinafter called the "Bonds") of the series and designation indicated on the face hereof. Said authorized issue of Bonds is not limited in aggregate principal amount, except as otherwise provided in the Resolution hereinafter mentioned, and consists or may consist of one or more series of varying denominations, dates, maturities, interest rates and other provisions, as in said Resolution provided, all issued and to be issued pursuant to the provisions of the Revenue Bond Law of 1941 as made applicable by Article 6a of Chapter 6 of Division 6 of the California Public Utilities Code and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (hereinafter called the "Act"). This

Bond is issued pursuant to a resolution of the Board of Directors of the District, adopted January 7, 1971, providing for the issuance of the Bonds, as amended and supplemented (the "Resolution"), including as amended and supplemented by a Sixty-Sixth Supplemental Resolution, adopted May 18, 2023, authorizing the issuance of the 2023 Series [] Bonds. Reference is hereby made to the Resolution and the Act for a description of the terms on which the Bonds are issued and to be issued, the provisions with regard to the nature and extent of the Revenues, as that term is defined in the Resolution, and the rights of the registered owners of the Bonds; and all the terms of the Resolution and the Act are hereby incorporated herein and constitute a contract between the District and the registered owner from time to time of this Bond, and to all the provisions thereof the registered owner of this Bond, by its acceptance hereof, consents and agrees. Additional bonds may be issued on a parity with the Bonds of this authorized issue, but only subject to the conditions and limitations contained in the Resolution.

The Bonds and the interest thereon (to the extent set forth in the Resolution), together with the Parity Bonds (as defined in the Resolution) heretofore or hereafter issued by the District, and the interest thereon, are payable from, and are secured by a charge and lien on, the Net Revenues derived by the District from the Electric System (as those terms are defined in the Resolution). The District hereby covenants and warrants that for the payment of the Bonds and interest thereon, there have been created and will be maintained by the District special funds into which there shall be deposited from Net Revenues available for that purpose sums sufficient to pay the principal of, and interest on, all of the Bonds, as such principal and interest become due, and as an irrevocable charge the District has allocated Net Revenues to such payment, all in accordance with the Resolution.

The Bonds are special obligations of the District, and are payable, both as to principal and interest, out of the Net Revenues pertaining to the Electric System, and not out of any other fund or moneys of the District. No holder of this Bond shall ever have the right to compel any exercise of the taxing power of the District to pay this Bond or the interest hereon.

[The 2023 Series [] Bonds are not subject to redemption.][**Redemption Terms to be Determined at Time of Sale and Conformed to the applicable Official Statement and applicable Sales Certificate**]

This Bond is transferable by the registered owner hereof, in person or by the attorney of such owner duly authorized in writing, at the designated corporate trust office of the Trustee but only in the manner, subject to the limitations and upon payment of the charges provided in the Resolution, and upon surrender and cancellation of this Bond. Upon such transfer a new fully registered Bond or Bonds without coupons, of authorized denomination or denominations, for the same aggregate principal amount and maturity will be issued to the transferee in exchange herefor. No transfer of this Bond will be made during the 15 days next preceding each interest payment date.

The District, the Trustee and any paying agent may deem and treat the registered owner hereof as the absolute owner hereof for all purposes, and the District, the Trustee and any paying agent shall not be affected by any notice to the contrary.

The rights and obligations of the District and of the holders and registered owners of the Bonds may be modified or amended at any time in the manner, to the extent, and upon the terms provided in the Resolution, provided that no such modification or amendment shall (i) extend the fixed maturity of any Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce the amount of any premium payable upon the redemption hereof, without the consent of the holder of each Bond so affected, or (ii) reduce the percentage of Bonds required for the affirmative vote or written consent to an amendment or modification, without the consent of the holders of all the Bonds then outstanding, or (iii) without its written consent thereto, modify any of the rights or obligations of the Trustee.

It is hereby certified and recited that any and all acts, conditions and things required to exist, to happen and to be performed, precedent to and in the incurring of the indebtedness evidenced by this Bond, and in the issuing of this Bond, do exist, have happened and have been performed in due time, form and manner, as required by the Constitution and statutes of the State of California, and that this Bond, together with all other indebtedness of the District pertaining to the Electric System, is within every debt and other limit prescribed by the Constitution and the statutes of the State of California, and is not in excess of the amount of Bonds permitted to be issued under the Resolution.

This Bond shall not be entitled to any benefit under the Resolution, or become valid or obligatory for any purpose, until the certificate of authentication hereon endorsed shall have been signed by the Trustee.

IN WITNESS WHEREOF, SACRAMENTO MUNICIPAL UTILITY DISTRICT has caused this Bond to be executed in its name and on its behalf by the facsimile signature of the President of its Board of Directors and by the facsimile signature of its Treasurer and countersigned by the facsimile signature of its Secretary, and the seal of the District to be reproduced hereon by facsimile, and this Bond to be dated as of the date first written above.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
President of the Board of Directors

By _____
Treasurer of the District

(SEAL)

Countersigned:

Secretary of the District

CERTIFICATE OF AUTHENTICATION AND REGISTRATION

This is one of the Bonds described in the within-mentioned Resolution and registered on the date set forth below.

Dated: U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Trustee

By _____
Authorized Officer

ASSIGNMENT

For value received _____ hereby sell, assign and transfer unto _____ whose taxpayer identification number is _____ the within-mentioned Bond and hereby irrevocably constitute and appoint _____ attorney, to transfer the same on the books of the District at the office of the Trustee, with full power of substitution in the premises.

NOTE: The signature to this Assignment must correspond with the name on the face of the within Registered Bond in every particular, without alteration or enlargement or any change whatsoever.

Dated: _____

Signature Guaranteed by:

NOTE: Signature must be guaranteed by an eligible guarantor institution

APPENDIX B

FORM OF PROPOSED AMENDMENTS TO MASTER RESOLUTION

SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. __-__-__

_____ SUPPLEMENTAL RESOLUTION

AMENDING RESOLUTION NO. 6649

(Supplemental to Resolution No. 6649
Adopted January 7, 1971)

Adopted: _____, 20__

RESOLUTION NO. __-__-__

**Supplemental Resolution
(Supplemental to Resolution No. 6649,
Adopted January 7, 1971)
Amending Resolution No. 6649**

WHEREAS, the Board of Directors (the “Board”) of the Sacramento Municipal Utility District (the “District”), on January 7, 1971, adopted its Resolution No. 6649 (as previously supplemented and amended, herein called the “Master Resolution”) providing for the issuance of the District’s Electric Revenue Bonds (the “Bonds”);

WHEREAS, Section 8.03 of the Master Resolution provides that the District may amend the Master Resolution by a supplemental resolution to be effective when there shall have been filed with the District or the Trustee the written consents of the holders and registered owners of 60% of the Bonds then outstanding;

WHEREAS, the Board has determined to amend Sections 1.03, 3.02, 3.06, 5.04 and 6.08 of the Master Resolution, which amendments the Board deems necessary and desirable and not inconsistent with the Master Resolution;

WHEREAS, the District has obtained the consents of the holders and registered owners of 60% of the Bonds outstanding;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Sacramento Municipal Utility District, as follows:

ARTICLE _____

AMENDMENT OF MASTER RESOLUTION

SECTION _____. Amendment of Section 1.03 of Master Resolution. A new definition of “Subsidy” shall be added to Section 1.03 of the Master Resolution in correct alphabetical order to read as follows:

‘Subsidy

“Subsidy” means any subsidy, reimbursement or other payment from the federal government of the United States of America under the American Recovery and Reinvestment Act of 2009 (or any similar legislation or regulation of the federal government of the United States of America or any other governmental entity or any extension of any of such legislation or regulation).’

SECTION _____. Amendment of Section 3.02 of Master Resolution. A new paragraph shall be added to the end of Section 3.02 of the Master Resolution to read as follows:

“For purposes of the calculations specified in this Section 3.02: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that the District receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by the District with respect to or in connection with such Parity Bonds during such period of time.”

SECTION _____. Amendment of Section 3.06 of Master Resolution. A new paragraph shall be added to the end of Section 3.06 of the Master Resolution to read as follows:

“For purposes of the calculations specified in this Section 3.06: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that the District receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by the District with respect to or in connection with such Parity Bonds during such period of time.”

SECTION _____. Amendment of Section 5.04 of Master Resolution. A new paragraph shall be added to the end of Section 5.04 of the Master Resolution to read as follows:

“For purposes of calculating the “debt service ratio” and, unless otherwise specified in a Supplemental Resolution providing for the issuance of a series of Parity Bonds, the amount required to be maintained in the Reserve Fund pursuant to this Section 5.04: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that the District receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by the District with respect to or in connection with such Parity Bonds during such period of time.”

SECTION _____. Amendment of Section 6.08 of Master Resolution. A new paragraph shall be added to the end of Section 6.08 of the Master Resolution to read as follows:

“For purposes of the calculations specified in this Section 6.08: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that the District receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by the District with respect to or in connection with such Parity Bonds during such period of time.”

SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. 23-05-07

FOURTEENTH SUPPLEMENTAL RESOLUTION

AUTHORIZING THE ISSUANCE OF

SUBORDINATED ELECTRIC REVENUE REFUNDING BONDS,
2023 SERIES C

Adopted: May 18, 2023

(Supplemental to Resolution No. 85-11-1 adopted November 7, 1985
as amended and restated by Resolution No. 01-06-10 adopted June 21, 2001)

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RESOLUTION NO. 23-05-07

Fourteenth Supplemental Resolution
(Supplemental to Resolution No. 85-11-1 Adopted November 7, 1985,
as amended and restated by Resolution No. 01-06-10 Adopted June 21, 2001)

Subordinated Electric Revenue Refunding Bonds,
2023 Series C

WHEREAS, the Board of Directors (the “Board”) of the Sacramento Municipal Utility District (the “District”), on November 7, 1985, adopted its Resolution No. 85-11-1 which was amended and restated by Resolution No. 01-06-10, adopted on June 21, 2001, providing for the issuance of the District’s Subordinated Electric Revenue Bonds (as supplemented and amended, herein called the “Subordinate Master Resolution”);

WHEREAS, the Subordinate Master Resolution provides that the District may issue bonds from time to time as the issuance thereof is authorized by the Board by a supplemental resolution;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Subordinate Master Resolution and the Act (as defined in the Subordinate Master Resolution);

WHEREAS, the District previously authorized the issuance of its Subordinated Electric Revenue Refunding Bonds, 2022 Series C pursuant to the Subordinate Master Resolution but such bonds were not issued; and

WHEREAS, the District has determined to issue its Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “2023C Subordinated Bonds”), in the aggregate principal amount determined as set forth in Section 82.02 to (i) refund certain series of the District’s Electric Revenue Bonds (to be identified in the Sales Certificate) (the “Refunded Bonds”), and (ii) pay costs of issuance (to the extent set forth in the Sales Certificate);

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Sacramento Municipal Utility District, as follows:

ARTICLE LXXXI

AUTHORITY AND DEFINITIONS

Section 81.01. Supplemental Resolution. This Fourteenth Supplemental Resolution is supplemental to the Subordinate Master Resolution.

Section 81.02. Definitions; Prevailing Time.

(1) Except as provided by this Fourteenth Supplemental Resolution, all terms which are defined in Section 1.03 of the Subordinate Master Resolution shall have the same meanings in this Fourteenth Supplemental Resolution as such terms are given in said Section 1.03. Unless otherwise provided herein, all references to a particular time are to New York City

time. In the event of a conflict between the meanings given in said Section 1.03 and the meanings given in this Section, the meanings given in this Section shall prevail.

(2) In this Fourteenth Supplemental Resolution:

Alternate Credit Enhancement shall mean a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof as a replacement or substitute for any Credit Enhancement then in effect and providing for or supporting the payment of the principal of and interest on the 2023C Subordinated Bonds.

Alternate Liquidity Facility shall mean a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof as a replacement or substitute for any Liquidity Facility then in effect and providing for the payment of the Purchase Price of Tendered Bonds.

Alternate Rate shall mean, on any Rate Determination Date, for any Interest Rate Mode other than a Direct Purchase Index Mode, an Index Mode or a Term Rate Mode, a rate per annum equal to 110% of (a) the SIFMA Municipal Swap Index of Municipal Market Data most recently available as of the date of determination, or (b) if such index is no longer available, or if the SIFMA Municipal Swap Index is no longer published, the S&P Municipal Bond 7 Day High Grade Rate Index, or if neither the SIFMA Municipal Swap Index nor the S&P Municipal Bond 7 Day High Grade Rate Index is published, the index determined to equal the prevailing rate determined by the Remarketing Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Remarketing Agent to be comparable under the circumstances to the criteria used by the Securities Industry and Financial Markets Association to determine the SIFMA Municipal Swap Index just prior to when the Securities and Financial Markets Association stopped publishing the SIFMA Municipal Swap Index. The Trustee shall make the determinations required by this definition, upon notification from the District, if there is no Remarketing Agent, if the Remarketing Agent fails to make any such determination or if the Remarketing Agent has suspended its remarketing efforts in accordance with the Remarketing Agreement.

Amortization End Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Amortization Interest Payment Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Amortization Period shall mean, in the event the 2023C Subordinated Bonds are not purchased or remarketed on any Bank Purchase Date and the other conditions set forth in Section 84.02(b) are satisfied, the period commencing on the Bank Purchase Date and ending on the Amortization End Date.

Amortization Principal Payment Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Applicable Factor shall mean, upon any conversion to a Direct Purchase Index Rate Period, the percentage of the Direct Purchase Index designated in writing by the District as the Applicable Factor for such Direct Purchase Index Rate Period pursuant to Section 82.09(a); provided, however, that the Applicable Factor shall never be less than 65% unless a Favorable Opinion of Bond Counsel is delivered in connection with the conversion to such Direct Purchase Index Rate Period.

Applicable Spread shall mean, with respect to any Direct Purchase Index Rate Period, the number of basis points determined by the Market Agent on or before the first day of such Direct Purchase Index Rate Period and designated by the District in accordance with Section 82.09(a) (which may include a schedule for the Applicable Spread based upon the ratings assigned to any indebtedness of the District) that, when added to the product of the Direct Purchase Index multiplied by the Applicable Factor, would equal the minimum interest rate per annum that would enable the 2023C Subordinated Bonds to be sold on such date at a price equal to the principal amount thereof (without regard to accrued interest, if any, thereon).

Authorized Denominations shall mean (i) with respect to 2023C Subordinated Bonds in a Daily Mode or Weekly Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof; (ii) with respect to 2023C Subordinated Bonds in a Flexible Mode, \$100,000 and any integral multiple of \$1,000 in excess thereof; (iii) with respect to 2023C Subordinated Bonds in a Direct Purchase Index Mode or Index Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof; and (iv) with respect to 2023C Subordinated Bonds in a Term Rate Mode or a Fixed Rate Mode, \$5,000 and any integral multiple thereof.

Available Amount shall mean the amount available under a Credit Enhancement or Liquidity Facility, as applicable, to pay the principal of and interest on the 2023C Subordinated Bonds or the Purchase Price of the 2023C Subordinated Bonds, as applicable.

Available Moneys shall mean (a) if a Credit Enhancement is in effect, (i) moneys drawn under the Credit Enhancement which at all times since their receipt by the Trustee were held in a separate segregated account or accounts or subaccount or subaccounts in which no moneys (other than those drawn under the Credit Enhancement) were at any time held, (ii) moneys which have been paid to the Trustee and have been on deposit with the Trustee for at least 124 days (or, if paid to the Trustee by an “affiliate,” as defined in Bankruptcy Code §101(2), of the District, 366 days) during and prior to which no Event of Bankruptcy shall have occurred, (iii) any other moneys, if, in the opinion of nationally recognized counsel experienced in bankruptcy matters (which opinion shall be acceptable to each Rating Agency then rating the 2023C Subordinated Bonds), the application of such moneys will not constitute a voidable preference in the event of the occurrence of an Event of Bankruptcy, and (iv) investment earnings on any of the moneys described in clauses (i), (ii) and (iii) of this definition; and (b) if a Credit Enhancement is not in effect, “Available Moneys” means any moneys deposited with the Trustee.

Bank shall mean, while the 2023C Subordinated Bonds are in a Direct Purchase Index Mode, the Holder of the 2023C Subordinated Bonds, provided that there is a single Holder of all of the 2023C Subordinated Bonds and provided further that the 2023C Subordinated Bonds are not then held under the book-entry system of a Securities Depository. If there is more than

one Holder of the 2023C Subordinated Bonds while the 2023C Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Holders owning a majority of the aggregate principal amount of the 2023C Subordinated Bonds then Outstanding. If the 2023C Subordinated Bonds are held under the book-entry system of a Securities Depository during any Direct Purchase Index Mode, “Bank” means the Beneficial Owner of the 2023C Subordinated Bonds, provided that there is a single Beneficial Owner of all of the 2023C Subordinated Bonds. If there is more than one Beneficial Owner of the 2023C Subordinated Bonds while the 2023C Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Beneficial Owners who are the beneficial owners of a majority of the aggregate principal amount of the 2023C Subordinated Bonds then Outstanding.

Bank Purchase Date shall mean, during any Direct Purchase Index Rate Period, (i) the date designated by the District pursuant to Section 82.11(a) and (ii) the date which is five Business Days after the date on which the Trustee receives written notice from the Bank under a Continuing Covenant Agreement which (x) advises the Trustee of the occurrence and continuance of an “Event of Default” under and as defined in such Continuing Covenant Agreement and (y) directs the Trustee to cause a mandatory tender for purchase of the 2023C Subordinated Bonds by reason of such “Event of Default.”

Bank Rate shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Bankruptcy Code means Title 11 of the United States Code, as amended, and any successor statute.

Beneficial Owner shall mean, so long as the 2023C Subordinated Bonds are held in the Book-Entry System, any Person who acquires a beneficial ownership interest in a 2023C Subordinated Bond held by the Securities Depository. If at any time the 2023C Subordinated Bonds are not held in the Book-Entry System, Beneficial Owner shall mean Holder for purposes of the Subordinate Master Resolution.

Bond Counsel shall mean any firm of nationally recognized municipal bond attorneys selected by the District and experienced in the issuance of municipal bonds and matters relating to the exclusion of the interest thereon from gross income for federal income tax purposes.

Book-Entry System shall mean the system maintained by the Securities Depository.

Business Day shall mean any day other than (i) a Saturday or Sunday or (ii) a day on which banks located in (a) the State of California or the State of New York, (b) the city or cities in which the principal office of the Trustee, the Paying Agent, the Remarketing Agent, if any, the Bank, if any, or the Calculation Agent, if any, are located, or (c) the city or cities in which the office of the Credit Provider or Liquidity Provider at which it will pay draws or advances is located, are required or authorized to remain closed, (iii) a day on which The New York Stock Exchange or Federal Reserve Bank is closed or (iv) a day on which the principal offices of the Credit Provider or Liquidity Provider are closed.

Calculation Agent shall mean, (i) during any Direct Purchase Index Rate Period, the Bank or any other party appointed by the District with the consent of the Bank so long as the Bank owns a majority in aggregate principal amount of the 2023C Subordinated Bonds and (ii) during any Index Rate Period, the Trustee or any other party appointed by the District to act as calculation agent for the 2023C Subordinated Bonds.

Call Protection Date shall mean, with respect to any conversion to a Term Rate Period or Index Rate Period, the date specified by the District in writing as the Call Protection Date for such Term Rate Period or Index Rate Period on or before the first day of such Term Rate Period or Index Rate Period.

Code shall mean the Internal Revenue Code of 1986, as amended.

Continuing Covenant Agreement shall mean, during any Direct Purchase Index Rate Period, any agreement between the District and the Bank which may be designated as the Continuing Covenant Agreement.

Conversion Date shall mean, with respect to the 2023C Subordinated Bonds in a particular Interest Rate Mode, the day on which another Interest Rate Mode for the 2023C Subordinated Bonds begins, with respect to the 2023C Subordinated Bonds in a Term Rate Mode, the day on which a new Term Rate Period begins, with respect to 2023C Subordinated Bonds in a Direct Purchase Index Mode, the day on which a new Direct Purchase Index Rate Period begins, and with respect to 2023C Subordinated Bonds in an Index Mode, the day on which a new Index Rate Period begins.

Conversion Notice shall mean the notice from the District to the other Notice Parties pursuant to Section 82.11(a)(i).

Credit Enhancement shall mean, with respect to the 2023C Subordinated Bonds, a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof and then in effect and providing for or supporting the payment of the principal of and interest on the 2023C Subordinated Bonds and, upon replacement of any such Credit Enhancement with an Alternate Credit Enhancement, the Alternate Credit Enhancement then in effect.

Credit Provider shall mean, with respect to the 2023C Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Credit Enhancement, if any, then in effect for the 2023C Subordinated Bonds.

Credit Provider Failure or Liquidity Provider Failure shall mean a failure of a Credit Provider or Liquidity Provider, as applicable, to pay a properly presented and strictly conforming draw or request for advance under a Credit Enhancement or Liquidity Facility, as applicable, or the filing or commencement of any bankruptcy or insolvency proceedings by or against a Credit Provider or Liquidity Provider, as applicable, or a Credit Provider or Liquidity Provider, as applicable, shall declare a moratorium on the payment of its unsecured debt obligations or shall repudiate a Credit Enhancement or Liquidity Facility, as applicable.

Current Mode shall have the meaning specified in Section 82.11(a).

Daily Mode shall mean the Interest Rate Mode during which the 2023C Subordinated Bonds bear interest at the Daily Rate.

Daily Rate shall mean the per annum interest rate on any 2023C Subordinated Bond in the Daily Mode determined pursuant to Section 82.06(a).

Daily Rate Period shall mean the period during which a 2023C Subordinated Bond in the Daily Mode shall bear a Daily Rate, which shall be from the Business Day upon which a Daily Rate is set to but not including the next succeeding Business Day.

Default Rate shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Delayed Remarketing Period shall have the meaning specified in Section 84.10(b) hereof.

Determination of Taxability shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Direct Purchase Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Market Agent.

Direct Purchase Index Mode shall mean the Interest Rate Mode during which the 2023C Subordinated Bonds bear interest at a Direct Purchase Index Rate.

Direct Purchase Index Rate shall mean the per annum interest rate on any 2023C Subordinated Bond in the Direct Purchase Index Mode determined in accordance with Section 82.09, being the Direct Purchase Index Rate, the Taxable Rate, the Default Rate or the Bank Rate, as applicable.

Direct Purchase Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

Direct Purchase Index Rate Effective Period shall mean, during any Direct Purchase Index Rate Period, the period from and including the first day of such Direct Purchase Index Rate Period to but excluding the next succeeding Direct Purchase Index Rate Reset Date and, thereafter, means each Direct Purchase Index Rate Reset Date to but excluding the next succeeding Direct Purchase Index Rate Reset Date.

Direct Purchase Index Rate Period shall mean the period from (and including) the date on which the 2023C Subordinated Bonds begin to bear interest in the Direct Purchase Index Mode to (but excluding) the earliest to occur of (i) the immediately succeeding Bank Purchase Date, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of the 2023C Subordinated Bonds have been redeemed or defeased in full and (iv) the Maturity Date.

Direct Purchase Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

District Purchase Account shall mean the account by that name in the Purchase Fund created in Section 84.09.

Electronic Means shall mean telecopy, facsimile transmission, e-mail transmission or other similar electronic means of communication providing evidence of transmission, including a telephonic communication confirmed by any other method set forth in this definition.

Eligible Account shall mean an account that is either (a) maintained with a federal or state-chartered depository institution or trust company that has a Standard & Poor's short-term debt rating of at least 'A-2' (or, if no short-term debt rating, a long-term debt rating of 'BBB+'); or (b) maintained with the corporate trust department of a federal depository institution or state-chartered depository institution subject to regulations regarding fiduciary funds on deposit similar to Title 12 of the U.S. Code of Federal Regulation Section 9.10(b), which, in either case, has corporate trust powers and is acting in its fiduciary capacity. In the event that a fund or account required to be an "Eligible Account" no longer complies with the requirements listed above, the Trustee shall promptly (and, in any case, within not more than 30 calendar days) move such fund or account to another financial institution such that the Eligible Account requirements stated above will again be satisfied.

Event of Bankruptcy shall mean any of the following events:

(i) the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2023C Subordinated Bonds, or an "affiliate" of the District as defined in Bankruptcy Code § 101(2)) shall (a) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator or the like of the District (or such other Person) or of all or any substantial part of their respective property, (b) commence a voluntary case under the Bankruptcy Code, or (c) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts; or

(ii) a proceeding or case shall be commenced, without the application or consent of the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2023C Subordinated Bonds, or an "affiliate" of the District as defined in Bankruptcy Code § 101(2)) in any court of competent jurisdiction, seeking (a) the liquidation, reorganization, dissolution, winding-up, or composition or adjustment of debts, of the District (or any such other Person), (b) the appointment of a trustee, receiver, custodian, liquidator or the like of the District (or any such other Person) or of all or any substantial part of their respective property, or (c) similar relief in respect of the District (or any such other Person) under any law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts.

Event of Taxability shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Expiration Date shall mean the stated expiration date of a Credit Enhancement or a Liquidity Facility, as it may be extended from time to time as provided in the Credit Enhancement or the Liquidity Facility, or any earlier date on which a Credit Enhancement or a Liquidity Facility shall terminate at the direction of the District.

Favorable Opinion of Bond Counsel shall mean, with respect to any action the occurrence of which requires such an opinion, an Opinion of Counsel, which shall be a Bond Counsel, to the effect that such action is permitted under the Subordinate Master Resolution and will not, in and of itself, cause interest on the 2023C Subordinated Bonds to be included in gross income for purposes of federal income taxation.

Fitch shall mean Fitch, Inc., and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “Fitch” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

Fixed Rate shall mean the per annum interest rate on any 2023C Subordinated Bond in the Fixed Rate Mode determined pursuant to Section 82.07(b).

Fixed Rate Bond shall mean a 2023C Subordinated Bond in the Fixed Rate Mode.

Fixed Rate Mode shall mean the Interest Rate Mode during which the 2023C Subordinated Bonds bear interest at the Fixed Rate.

Fixed Rate Period shall mean the period from the Conversion Date upon which the 2023C Subordinated Bonds were converted to the Fixed Rate Mode to but not including the Maturity Date for the 2023C Subordinated Bonds.

Flexible Mode shall mean the Interest Rate Mode during which the 2023C Subordinated Bonds bear interest at Flexible Rates.

Flexible Rate shall mean the per annum interest rate on a Flexible Rate Bond determined for such Flexible Rate Bond pursuant to Section 82.05. The Flexible Rate Bonds may bear interest at different Flexible Rates.

Flexible Rate Bond shall mean a 2023C Subordinated Bond in the Flexible Mode.

Flexible Rate Period shall mean the period of from one to 270 calendar days (which period must end on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date) during which a Flexible Rate Bond shall bear interest at a Flexible Rate, as established by the Remarketing Agent pursuant to Section 82.05. The Flexible Rate Bonds may be in different Flexible Rate Periods.

Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Remarketing Agent.

Index Mode shall mean the Interest Rate Mode during which the 2023C Subordinated Bonds bear interest at an Index Rate.

Index Rate shall mean the per annum interest rate on any 2023C Subordinated Bond in the Index Mode determined in accordance with Section 82.10.

Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Rate Effective Period shall mean, during any Index Rate Period, the period from and including the first day of such Index Rate Period through and including the day immediately preceding the next succeeding Index Rate Reset Date and, thereafter, means each Index Rate Reset Date through and including the day immediately preceding the next succeeding Index Rate Reset Date.

Index Rate Period shall mean the period from (and including) the date on which the 2023C Subordinated Bonds begin to bear interest in the Index Mode to (but excluding) the earliest to occur of (i) the Business Day immediately succeeding the last day thereof, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of the 2023C Subordinated Bonds have been redeemed or defeased in full and (iv) the final Maturity Date.

Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Percentage shall mean, upon any conversion to an Index Rate Period, the percentage of the Index determined by the Remarketing Agent in accordance with Section 82.10; provided, however, that the Index Percentage shall never be less than 65% unless a Favorable Opinion of Bond Counsel is delivered on or before the determination of the Index Percentage by the Remarketing Agent.

Index Spread shall mean, upon any conversion to an Index Rate Period, the fixed per annum rate determined by the Remarketing Agent in accordance with Section 82.10.

Initial Liquidity Facility shall mean the Standby Bond Purchase Agreement entered into with the Initial Liquidity Provider with respect to the initial issuance of the 2023C Subordinated Bonds, as amended, restated, supplemented or otherwise modified pursuant to its terms.

Initial Liquidity Provider shall mean TD Bank, N.A., as initial Liquidity Provider.

Interest Accrual Period shall mean the period during which a 2023C Subordinated Bond accrues interest payable on the next Interest Payment Date applicable thereto. Each Interest Accrual Period for 2023C Subordinated Bonds shall be the period commencing on (and including) the last Interest Payment Date to which interest has been paid (or, if no interest has been paid in such Interest Rate Mode, commencing on (and including) the date of original authentication and delivery of the 2023C Subordinated Bonds, or the Conversion Date, as the case may be) to (and excluding) the Interest Payment Date on which interest is to be paid. If, at the time of authentication of any 2023C Subordinated Bond, interest is in default or overdue on the 2023C Subordinated Bonds, such 2023C Subordinated Bond shall bear interest from the date to which interest has previously been paid in full or made available for payment in full on Outstanding 2023C Subordinated Bonds.

Interest Payment Date shall mean each date on which interest is to be paid and is: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2023C Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2023C Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day specified in writing by the District in connection with the Conversion Date to such Term Rate Mode or Fixed Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the applicable Reimbursement Agreement or Liquidity Facility.

Interest Period shall mean, for 2023C Subordinated Bonds in a particular Interest Rate Mode, the period of time that such 2023C Subordinated Bonds bear interest at the rate (per annum) which becomes effective at the beginning of such period, and shall include a Flexible Rate Period, a Daily Rate Period, a Weekly Rate Period, a Direct Purchase Index Rate Effective Period, an Index Rate Effective Period, a Term Rate Period and a Fixed Rate Period.

Interest Rate Mode shall mean, as the context may require, the Flexible Mode, the Daily Mode, the Weekly Mode, the Direct Purchase Index Mode, the Index Mode, the Term Rate Mode or the Fixed Rate Mode.

Liquidity Facility shall mean, with respect to the 2023C Subordinated Bonds, initially, the Initial Liquidity Facility providing for the payment of the Purchase Price of Tendered Bonds and upon replacement of such Initial Liquidity Facility with an Alternate Liquidity Facility, the Alternate Liquidity Facility then in effect.

Liquidity Facility Purchase Account shall mean the account by that name in the Purchase Fund created by Section 84.09.

Liquidity Provider shall mean, with respect to the 2023C Subordinated Bonds, initially, the Initial Liquidity Provider and, upon replacement of the Initial Liquidity Facility with an Alternate Liquidity Facility, any bank, insurance company, pension fund or other financial institution which provides the Alternate Liquidity Facility, if any, then in effect for the 2023C Subordinated Bonds.

Liquidity Provider Bonds shall mean any 2023C Subordinated Bonds purchased by the Liquidity Provider with funds drawn on or advanced under the Liquidity Facility or Credit Enhancement, as applicable.

Long-Term Mode shall mean a Term Rate Mode or a Fixed Rate Mode.

Mandatory Purchase Date shall mean: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such Flexible Rate Bond, (ii) with respect to 2023C Subordinated Bonds in the Term Rate Mode, the first Business Day following the last day of each Term Rate Period applicable to such 2023C Subordinated Bonds, (iii) with respect to any 2023C Subordinated Bonds, any Conversion Date applicable to such 2023C Subordinated Bond (except, unless otherwise specified in the Sales Certificate in connection with the initial issuance of the 2023C Subordinated Bonds or in writing by the District in connection with a conversion of the Interest Rate Mode to the Daily Mode or the Weekly Mode, any Conversion Date in respect of a conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode) or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 82.11 not failed to occur (except, unless otherwise specified in the Sales Certificate in connection with the initial issuance of the 2023C Subordinated Bonds or in writing by the District in connection with a conversion of the Interest Rate Mode to the Daily Mode or the Weekly Mode, any such date in respect of a proposed conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode), (iv) with respect to any 2023C Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2023C Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility supporting such 2023C Subordinated Bonds, (vi) with respect to any 2023C Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility, which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023C Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee's receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023C Subordinated Bonds and in no event later than the Business Day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2023C Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2023C Subordinated Bonds (other than interest on 2023C Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2023C Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee's receipt of such notice, (viii) with respect to 2023C Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee's receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023C Subordinated Bonds, (ix) with respect to 2023C Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2023C Subordinated Bonds, and (x) with respect to 2023C Subordinated Bonds in the Direct Purchase Index Mode, each

Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Market Agent shall mean the Person appointed by the District to serve as market agent in connection with a conversion to any Direct Purchase Index Rate Period.

Maturity Date shall mean the maturity date or maturity dates of the 2023C Subordinated Bonds set forth in the Sales Certificate, or, if established pursuant to Section 82.11(b)(v) upon a change to the Fixed Rate Mode, the Serial Maturity Dates.

Maximum Rate shall mean (i) with respect to Liquidity Provider Bonds and 2023C Subordinated Bonds in the Direct Purchase Index Mode, a rate of interest per annum not exceeding the maximum non-usurious lawful rate of interest permitted by applicable laws and (ii) with respect to all other 2023C Subordinated Bonds, a rate of interest of twelve percent (12%) per annum unless a lesser rate of interest is specified as the Maximum Rate in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period.

Moody's shall mean Moody's Investors Service and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

New Mode shall have the meaning specified in Section 82.11(a).

Notice Parties shall mean the Trustee, the Remarketing Agent, if any, the Paying Agent, the Credit Provider, if any, the Liquidity Provider, if any, the Bank, if any, the Market Agent, if any, and the Calculation Agent, if any.

Opinion of Counsel shall mean a written legal opinion from a firm of attorneys experienced in the matters to be covered in the opinion.

Outstanding, when used with reference to 2023C Subordinated Bonds, shall mean, as of any date, 2023C Subordinated Bonds theretofore or thereupon being authenticated and delivered under this Fourteenth Supplemental Resolution except:

(i) 2023C Subordinated Bonds cancelled by the Trustee, or delivered to the Trustee for cancellation, at or prior to such date;

(ii) 2023C Subordinated Bonds paid or deemed paid pursuant to Section 10.01 of the Subordinate Master Resolution; and

(iii) 2023C Subordinated Bonds in lieu of or in substitution for which other 2023C Subordinated Bonds shall have been authenticated and delivered pursuant to this Fourteenth Supplemental Resolution.

Person shall mean an individual, a corporation, a partnership, an association, a joint venture, a trust, an unincorporated organization or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

Principal Payment Date shall mean any date upon which the principal amount of 2023C Subordinated Bonds is due under the Subordinate Master Resolution, including any Maturity Date, any Serial Maturity Date, any Redemption Date, or the date the maturity of any 2023C Subordinated Bond is accelerated pursuant to the terms of the Subordinate Master Resolution.

Purchase Date shall mean (i) for a 2023C Subordinated Bond in the Daily Mode or the Weekly Mode, any Business Day selected by the Beneficial Owner of said 2023C Subordinated Bond pursuant to the provisions of Section 84.01, and (ii) any Mandatory Purchase Date.

Purchase Fund shall mean the fund by that name created in Section 84.09.

Purchase Price shall mean an amount equal to the principal amount of any 2023C Subordinated Bonds purchased on any Purchase Date, plus accrued interest to but excluding the Purchase Date; provided, however, that (i) if the Purchase Date for any 2023C Subordinated Bond to be purchased is an Interest Payment Date for such 2023C Subordinated Bond, the Purchase Price thereof shall be the principal amount thereof, and interest on such 2023C Subordinated Bond shall be paid to the Holder of such 2023C Subordinated Bond pursuant to the Subordinate Master Resolution and this Fourteenth Supplemental Resolution and (ii) in the case of a purchase on a Conversion Date or proposed Conversion Date which is preceded by a Term Rate Period or an Index Rate Period and which occurs prior to the day originally established as the last day of such preceding Term Rate Period or Index Rate Period, the Purchase Price of any 2023C Subordinated Bond to be purchased on such Conversion Date shall be the Redemption Price which would have been applicable to such 2023C Subordinated Bond if the preceding Term Rate Period or Index Rate Period had continued to the day originally established as its last day, plus accrued interest, if any.

Rate Determination Date shall mean any date on which the interest rate on 2023C Subordinated Bonds shall be determined, which, (i) in the case of the Flexible Mode, shall be the first day of an Interest Period; (ii) in the case of the Daily Mode, shall be each Business Day commencing with the first day (which must be a Business Day) the 2023C Subordinated Bonds become subject to the Daily Mode; (iii) in the case of the Weekly Mode, shall be (A) each Wednesday or, if Wednesday is not a Business Day, then the Business Day next succeeding such Wednesday, and (B) not later than the Business Day preceding a Conversion Date, a Substitution Date or a Mandatory Purchase Date specified in clause (viii) of the definition of Mandatory Purchase Date; (iv) in the case of the Term Rate Mode, shall be a Business Day no later than the Business Day next preceding the first day of an Interest Period, as determined by the Remarketing Agent; (v) in the case of the Direct Purchase Index Mode, each

Direct Purchase Index Rate Determination Date; (vi) in the case of the Index Mode, each Index Rate Determination Date, and (vii) in the case of the Fixed Rate Mode, shall be a date determined by the Remarketing Agent which shall be at least one Business Day prior to the Conversion Date.

Rating Agencies shall mean any of Moody's, S&P or Fitch, which is then providing a rating on the 2023C Subordinated Bonds at the request of the District.

Record Date shall mean (i) with respect to 2023C Subordinated Bonds in a Daily Mode, Weekly Mode, Flexible Mode, Direct Purchase Index Mode or Index Mode, the last Business Day before an Interest Payment Date, and (ii) with respect to 2023C Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, the fifteenth (15th) day (whether or not a Business Day) next preceding each Interest Payment Date.

Redemption Date shall mean the date fixed for redemption of 2023C Subordinated Bonds subject to redemption in any notice of redemption given in accordance with the terms of the Subordinate Master Resolution.

Redemption Price shall mean an amount equal to the principal of and premium, if any, and accrued interest, if any, on the 2023C Subordinated Bonds to be paid on the Redemption Date.

Reimbursement Agreement shall mean any reimbursement agreement, credit agreement, line of credit agreement, standby purchase agreement or other agreement by and between a Credit Provider or Liquidity Provider, as applicable, and the District.

Remarketing Agent shall mean any investment banking firm which may be appointed with respect to the 2023C Subordinated Bonds pursuant to Section 85.01.

Remarketing Agreement shall mean any agreement relating to the 2023C Subordinated Bonds by and between the District and a Remarketing Agent, as it may be amended or supplemented from time to time in accordance with its terms.

Remarketing Proceeds Account shall mean the account by that name in the Purchase Fund created in Section 84.09.

Representations Letter shall mean the Letter of Representations from the District to the Securities Depository in connection with the 2023C Subordinated Bonds in a book-entry system, as supplemented and amended from time to time.

Sales Certificate shall mean a written certificate of the District executed by the Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District or the designee of any of them prior to the issuance of the 2023C Subordinated Bonds setting forth the principal amount, Maturity Date or Maturity Dates, initial Interest Rate Mode, initial interest rate or rates, and such other matters with respect to the 2023C Subordinated Bonds as such officer may deem appropriate, as provided in Section 82.02.

S&P shall mean S&P Global Ratings and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “S&P” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent, if any.

S&P Municipal Bond 7 Day High Grade Rate Index shall mean for a Rate Determination Date, the level of the “S&P Municipal Bond 7 Day High Grade Rate Index” (formerly known as the J.J. Kenny Index) maintained by Standard and Poor’s for a one-week maturity as published each day.

Securities Depository shall mean The Depository Trust Company, and such other securities depository as the District may designate in a certificate of the District delivered to the Trustee.

Serial Bonds shall mean the 2023C Subordinated Bonds maturing on the Serial Maturity Dates, as determined pursuant to Section 82.11(b).

Serial Maturity Dates shall mean the dates on which the Serial Bonds mature, as determined pursuant to Section 82.11(b).

Serial Payments shall mean the payments to be made in payment of the principal of the Serial Bonds on the Serial Maturity Dates.

Short-Term Mode shall mean the Daily Mode, the Weekly Mode or the Flexible Mode.

SIFMA Index shall mean, for any applicable Rate Determination Date, the level of the index which is issued weekly and which is compiled from the weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meet specific criteria established from time to time by SIFMA and issued on Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day. If the SIFMA Index is no longer published, then “SIFMA Index” shall mean the S&P Municipal Bond 7 Day High Grade Rate Index. If the S&P Municipal Bond 7 Day High Grade Rate Index is no longer published, then “SIFMA Index” shall mean the prevailing rate determined by the Calculation Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Calculation Agent to be comparable under the circumstances to the criteria used by SIFMA to determine the SIFMA Index immediately prior to the date on which SIFMA ceased publication of the SIFMA Index. Notwithstanding the foregoing, if the SIFMA Index as determined as provided above would be less than 0.0%, then the SIFMA Index will be deemed to be 0.0%.

Substitution Date shall mean the date upon which an Alternate Credit Enhancement or Alternate Liquidity Facility is scheduled to be substituted for a Credit Enhancement or Liquidity Facility then in effect.

Taxable Date shall mean the date on which interest on the 2023C Subordinated Bonds is first includable in gross income of the Holder (including, without limitation, any

previous Holder) thereof as a result of an Event of Taxability as such a date is established pursuant to a Determination of Taxability.

Taxable Rate shall mean an interest rate per annum at all times equal to the product of the Direct Purchase Index Rate then in effect multiplied by the Taxable Rate Factor.

Taxable Rate Factor shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Tendered Bonds shall mean 2023C Subordinated Bonds tendered for purchase by the Holders or Beneficial Owners thereof pursuant to Section 84.01 or subject to mandatory tender for purchase on a Mandatory Purchase Date pursuant to Section 84.02.

Tender Notice shall mean a notice delivered by Electronic Means or in writing with respect to a 2023C Subordinated Bond that states (i) the principal amount of such 2023C Subordinated Bond to be purchased pursuant to Section 84.01, (ii) the Purchase Date on which such 2023C Subordinated Bond is to be purchased, (iii) applicable payment instructions with respect to the 2023C Subordinated Bonds being tendered for purchase and (iv) an irrevocable demand for such purchase.

Tender Notice Deadline with respect to a 2023C Subordinated Bond shall mean (i) during a Daily Mode with respect to such 2023C Subordinated Bond, 11:00 a.m. on any Business Day and (ii) during a Weekly Mode with respect to such 2023C Subordinated Bond, 5:00 p.m. on a Business Day not less than seven days prior to the applicable Purchase Date.

Term Rate shall mean the per annum interest rate for 2023C Subordinated Bonds in the Term Rate Mode determined pursuant to Section 82.07(a).

Term Rate Mode shall mean the Interest Rate Mode during which the 2023C Subordinated Bonds bear interest at the Term Rate.

Term Rate Period shall mean the period from (and including) the date on which the 2023C Subordinated Bonds begin to bear interest in a Term Rate Mode to (but excluding) the commencement date of the next succeeding Interest Period, including another Term Rate Period.

2023 Tax Certificate shall mean the Tax Certificate executed and delivered by the District in connection with the issuance of the 2023C Subordinated Bonds, as amended or supplemented from time to time in accordance with its terms.

Weekly Mode shall mean the Interest Rate Mode during which the 2023C Subordinated Bonds bear interest at the Weekly Rate.

Weekly Rate shall mean the per annum interest rate on 2023C Subordinated Bonds in the Weekly Mode determined pursuant to Section 82.06(b).

Weekly Rate Period shall mean the period during which a 2023C Subordinated Bond in the Weekly Mode shall bear a Weekly Rate, which shall be the period commencing on Thursday of each week to and including Wednesday of the following week, except (i) the first

Weekly Rate Period, which shall be from the date of issuance of the 2023C Subordinated Bonds if the 2023C Subordinated Bonds are initially issued in the Weekly Mode or the Conversion Date on which the Interest Rate Mode for the 2023C Subordinated Bonds is changed to a Weekly Mode to and including the Wednesday of the following week, and (ii) the last Weekly Rate Period which shall end on the day preceding the earliest to occur of the Conversion Date on which the Interest Rate Mode for the 2023C Subordinated Bonds is changed from the Weekly Mode to a different Interest Rate Mode, the Maturity Date or the Mandatory Purchase Date for such 2023C Subordinated Bond.

ARTICLE LXXXII

THE 2023C SUBORDINATED BONDS

Section 82.01. Authorization and Purpose of 2023C Subordinated Bonds.

The Board hereby authorizes the issuance of a series of revenue bonds of the District in accordance with the Subordinate Master Resolution, designated as “Subordinated Electric Revenue Refunding Bonds, 2023 Series C” (the “2023C Subordinated Bonds”) for the purpose of (i) refunding the Refunded Bonds and (ii) paying costs of issuance (to the extent set forth in the Sales Certificate).

Section 82.02. Terms, Registration, Denominations, Medium, Method and Place of Payment and Dating of 2023C Subordinated Bonds.

(a) The 2023C Subordinated Bonds shall be issued in the aggregate principal amount which, together with the aggregate principal amount, if any, of the District’s Electric Revenue Bonds sold and issued pursuant to the District’s Sixty-Sixth Supplemental Resolution adopted on the date hereof, Subordinated Electric Revenue Bonds, 2023 Series D, Subordinated Electric Revenue Bonds, 2023 Series E, and Subordinated Electric Revenue Refunding Bonds, 2023 Series F, shall not exceed \$630,000,000, shall bear interest at such initial rate or rates for such initial Interest Period, shall bear interest in such initial Interest Rate Mode, shall mature and become payable as to principal on such Maturity Date or Maturity Dates (not to exceed forty (40) years from the date of issuance of the 2023C Subordinated Bonds) in the amount and be subject to such mandatory sinking fund account payments on such mandatory sinking fund account payment dates, if any, all as set forth in the Sales Certificate. In addition to the provisions required pursuant to the terms of this Fourteenth Supplemental Resolution to be specified in the Sales Certificate, the Sales Certificate may contain such provisions, in a form approved by the District’s Bond Counsel and the District’s counsel, as the officer executing the Sales Certificate may deem necessary or desirable and consistent with the purpose of this Fourteenth Supplemental Resolution, including provisions (i) adding additional covenants and agreements to be observed by the District, (ii) curing, correcting, amending or supplementing any ambiguous, defective or ineffective provision contained in the Subordinate Master Resolution or this Fourteenth Supplemental Resolution, or (iii) amending or supplementing any provision contained herein to the extent necessary to obtain Credit Enhancement or a Liquidity Facility (including the Initial Liquidity Facility), to obtain a rating on the 2023C Subordinated Bonds, or to provide for the issuance of the 2023C Subordinated Bonds if, in the judgment of such officer such rating or provision is reasonable. The Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District,

the Secretary of the District or the Chief Financial Officer of the District, or the designee of any of them, is hereby authorized and instructed to execute and deliver the Sales Certificate and, upon execution and delivery thereof, the Sales Certificate shall be incorporated herein and in the Subordinate Master Resolution by reference. The execution and delivery of the Sales Certificate by any such officer shall be conclusive evidence that, where any approval, determination of necessity, desirability or consistency with the purpose of this Fourteenth Supplemental Resolution, or judgment or determination of reasonableness is required to be given or made, such approval, judgment or determination has been given or made.

(b) The 2023C Subordinated Bonds shall be issued in the form of fully registered 2023C Subordinated Bonds in Authorized Denominations and no provision of the Subordinate Master Resolution relating to coupon bonds or coupons shall apply to the 2023C Subordinated Bonds. 2023C Subordinated Bonds (other than 2023C Subordinated Bonds in the Direct Purchase Index Mode) shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2023C Subordinated Bonds and shall be registered as set forth in Section 86.04 of this Fourteenth Supplemental Resolution. 2023C Subordinated Bonds in the Direct Purchase Index Mode shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2023C Subordinated Bonds and shall be registered in the name of the Holder thereof or as otherwise directed by such Holder. Registered ownership of the 2023C Subordinated Bonds, or any portion thereof, may not thereafter be transferred except as set forth in the Continuing Covenant Agreement (during any time that the 2023C Subordinated Bonds are in the Direct Purchase Index Mode), Section 2.05 of the Subordinate Master Resolution and Section 86.04 of this Fourteenth Supplemental Resolution. Each 2023C Subordinated Bond in the Direct Purchase Index Mode shall contain a legend indicating that the transferability of such 2023C Subordinated Bond is subject to the restrictions set forth in this Fourteenth Supplemental Resolution.

(c) The 2023C Subordinated Bonds shall be dated as of the date of their initial issuance and shall be numbered in such manner as is determined by the Trustee.

(d) The principal of and premium, if any, and interest on the 2023C Subordinated Bonds shall be payable in lawful money of the United States of America.

(e) Subject to Section 86.04 of this Fourteenth Supplemental Resolution, interest on the 2023C Subordinated Bonds shall be paid on each Interest Payment Date by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode by check mailed on the date on which due to the Holders of the 2023C Subordinated Bonds at the close of business on the Record Date for the 2023C Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2023C Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2023C Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2023C Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of \$1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2023C Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2023C Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer

instructions provided by the Holder of such 2023C Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2023C Subordinated Bonds registered in the name of the Securities Depository (or its nominee), interest on any such 2023C Subordinated Bond shall be payable only upon surrender of such 2023C Subordinated Bond at the office of the Paying Agent.

(f) Subject to Section 86.04 of this Fourteenth Supplemental Resolution, the principal of and premium, if any, on each 2023C Subordinated Bond shall be payable on the Principal Payment Date of such 2023C Subordinated Bond upon surrender thereof at the office of the Paying Agent; provided that the Paying Agent may agree with the Holder of any 2023C Subordinated Bond (and hereby does so agree with the Bank during any Direct Purchase Index Rate Period) that such Holder may, in lieu of surrendering the same for a new 2023C Subordinated Bond, endorse on such 2023C Subordinated Bond a record of partial payment of the principal of such 2023C Subordinated Bond in the form set forth below (which shall be typed or printed on such 2023C Subordinated Bond):

PAYMENTS ON ACCOUNT OF PRINCIPAL

Payment Date	Principal Amount Paid	Balance of Principal Amount Unpaid	Signature of Holder
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The Paying Agent shall maintain a record of each such partial payment made in accordance with the foregoing agreement and such record of the Paying Agent shall be conclusive. Such partial payment shall be valid upon payment of the amount thereof to the Holder of such 2023C Subordinated Bond, and the District, the Trustee and the Paying Agent shall be fully released and discharged from all liability to the extent of such payment regardless of whether such endorsement shall or shall not have been made upon such 2023C Subordinated Bond by the Holder thereof and regardless of any error or omission in such endorsement.

(g) Except as may be specifically set forth herein, the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District may treat the Holder of a 2023C Subordinated Bond as the absolute owner thereof for all purposes, whether or not such 2023C Subordinated Bond shall be overdue, and the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District shall not be affected by any knowledge or notice to the contrary. Payment of the principal of and premium, if any, and interest on each 2023C Subordinated Bond shall be made only to such Holder, which payments shall be valid and effectual to satisfy and discharge the liability of such 2023C Subordinated Bond to the extent of the sum or sums so paid. All 2023C Subordinated Bonds paid at maturity or on earlier redemption pursuant to the provisions of this Section shall be cancelled by the Paying Agent.

(h) Each 2023C Subordinated Bond shall bear interest at the applicable rate or rates during each applicable Interest Accrual Period until the entire Principal Amount thereof has been paid.

(i) The Sales Certificate shall designate the series, amounts and maturity or sinking fund payment dates of the Refunded Bonds.

Section 82.03. Payment of Principal and Interest of 2023C Subordinated Bonds; Acceptance of Terms and Conditions.

(a) The interest on each 2023C Subordinated Bond shall become due and payable on the Interest Payment Dates with respect to such 2023C Subordinated Bond to and including the Maturity Date of such 2023C Subordinated Bond, and on each Redemption Date and on the date of any acceleration prior thereto. The principal of each 2023C Subordinated Bond shall become due and payable on the Principal Payment Date of such 2023C Subordinated Bond.

(b) By the acceptance of its 2023C Subordinated Bond, the Holder thereof shall be deemed to have agreed to all the terms and provisions of such 2023C Subordinated Bond as specified in such 2023C Subordinated Bond and the Subordinate Master Resolution, including without limitation the applicable Interest Periods, interest rates (including any applicable Alternate Rate), Purchase Dates, Mandatory Purchase Dates, Purchase Prices, mandatory and optional purchase and redemption provisions applicable to such 2023C Subordinated Bond, method and timing of purchase, redemption and payment. Such Holder further agrees that if, on any date upon which its 2023C Subordinated Bond is to be purchased, redeemed or paid at maturity or earlier due date, funds are on deposit with the Paying Agent or the Trustee to pay the full amount due on such 2023C Subordinated Bond, then such Holder shall have no rights under the Subordinate Master Resolution other than to receive such full amount due with respect to such 2023C Subordinated Bond and that interest on such 2023C Subordinated Bond shall cease to accrue as of such date.

(c) Notwithstanding anything herein to the contrary, while any 2023C Subordinated Bonds are Liquidity Provider Bonds, such Liquidity Provider Bonds shall bear interest and be payable at the times, in the manner and in the amounts required under the Liquidity Facility supporting such 2023C Subordinated Bonds or the Reimbursement Agreement related thereto.

Section 82.04. Calculation and Payment of Interest; Change in Interest Rate Mode; Maximum Rate.

(a) When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is the SIFMA Index, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is an index other than the SIFMA Index, interest shall be calculated on the basis specified in writing by the District on or before the first day of the applicable Direct Purchase Index Rate Period or Index Rate Period. When a Short-Term Mode is in effect, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Term Rate Mode or a Fixed Rate Mode is in effect, interest shall be calculated on the basis of a 360-day year comprised of twelve 30-day months. Payment of unpaid interest accrued on each 2023C Subordinated Bond during each Interest Accrual Period shall be made on the

applicable Interest Payment Date for such 2023C Subordinated Bond to the Holder of record of such 2023C Subordinated Bond on the applicable Record Date.

(b) The 2023C Subordinated Bonds in any Interest Rate Mode other than a Fixed Rate Mode may be changed to any other Interest Rate Mode at the times and in the manner hereinafter provided. Subsequent to such change in Interest Rate Mode (other than a change to a Fixed Rate Mode), the 2023C Subordinated Bonds may again be changed to a different Interest Rate Mode at the times and in the manner hereinafter provided. A Fixed Rate Mode shall be in effect until the Maturity Date, or acceleration thereof prior to the Maturity Date, and the 2023C Subordinated Bonds in a Fixed Rate Mode may not be changed to any other Interest Rate Mode.

(c) Subject to Section 82.09(b)(iii), no 2023C Subordinated Bonds shall bear interest at an interest rate higher than the Maximum Rate with respect thereto.

(d) In the absence of manifest error, the determination of interest rates (including any determination of rates in connection with a New Mode) and Interest Periods by the Remarketing Agent or the Calculation Agent, as applicable, as provided herein, and the record of interest rates maintained by the Paying Agent shall be conclusive and binding upon the Remarketing Agent, the Paying Agent, the Trustee, the District, the Holders and the Beneficial Owners.

Section 82.05. Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and in Section 82.04 hereof, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2023C Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2023C Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2023C Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2023C Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2023C Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the

Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Section 82.06. Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2023C Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023C Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period. In making any such determination the Remarketing Agent shall not take into account the per annum rate of interest that would be applicable to Liquidity Provider Bonds pursuant to the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

(a) During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

(b) During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Section 82.07. Determination of Term Rates and Fixed Rates.

(a) Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. Except as set forth in Section 82.11(a)(ii), the Term Rate shall be the minimum rate which, in the sole judgment of the Remarketing Agent, would result in a sale of such 2023C Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected, and the Call Protection Date specified, by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

(b) Fixed Rates. The Remarketing Agent shall determine the Fixed Rate for 2023C Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2023C Subordinated Bonds will have Serial Maturity Dates in accordance with Section 82.11(b)(v)). Except as set forth in Section 82.11(b)(v), the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2023C Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 82.11(b)(v), the Fixed Rate so established shall remain in effect until the Maturity Date of such 2023C Subordinated Bonds.

Section 82.08. Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2023C Subordinated Bonds (other than 2023C Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2023C Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2023C Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2023C Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2023C Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2023C Subordinated Bonds.

(a) For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2023C Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

(b) For 2023C Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2023C Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

Section 82.09. Determination of Direct Purchase Index Rates.

(a) During each Direct Purchase Index Rate Period, the 2023C Subordinated Bonds shall, subject to subsection (b) of this Section 82.09, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2023C Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2023C Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2023C Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2023C Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Master Resolution or this Fourteenth Supplemental Resolution to the contrary, including, without limitation, Section 84.02(b), but subject to Section 82.04(c) and Section 82.09(b)(ii) and (iii), from and after any Taxable Date, the interest rate on 2023C Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Master Resolution or this Fourteenth Supplemental Resolution to the contrary, including, without limitation, Section 84.02(b), but subject to Section 82.04(c) and Section 82.09(b)(iii), from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2023C Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2023C

Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Master Resolution or this Fourteenth Supplemental Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2023C Subordinated Bonds exceeds the Maximum Rate for such 2023C Subordinated Bonds, then (A) such 2023C Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2023C Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2023C Subordinated Bonds as calculated pursuant to this Section 82.09 and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2023C Subordinated Bonds as calculated pursuant to this Section 82.09 is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2023C Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2023C Subordinated Bonds are redeemed or tendered for purchase in accordance with this Fourteenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2023C Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything herein to the contrary, but subject to Section 82.04(c) and Section 82.09(b)(i), (ii) and (iii) during any Amortization Period, the 2023C Subordinated Bonds shall bear interest at the Bank Rate.

Section 82.10. Determination of Index Rates. During each Index Rate Period, the 2023C Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2023C Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2023C Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2023C Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2023C Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2023C Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2023C Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2023C Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the District shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2023C Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All

dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2023C Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Section 82.11. Changes in Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. Subject to the provisions of this Section, the District may effect a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period with respect to the 2023C Subordinated Bonds by following the procedures set forth in this Section.

(a) Changes to Interest Rate Modes Other Than Fixed Rate Mode; Changes in Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. The Interest Rate Mode for the 2023C Subordinated Bonds (other than the 2023C Subordinated Bonds in the Fixed Rate Mode) may be changed from one Interest Rate Mode to another Interest Rate Mode (other than the Fixed Rate Mode) and the Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2023C Subordinated Bonds may be changed, as follows:

(i) Notice to Notice Parties; Notice to Holders. No later than a Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2023C Subordinated Bonds preceding the proposed Conversion Date, the District shall give written notice to the Notice Parties of its intention to effect a change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period from the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period then prevailing (for purposes of this Section, the “Current Mode”) to another Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period (for purposes of this Section, the “New Mode”) specified in such written notice. Notice of the proposed change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be given by the Trustee by mail to the Holders of the 2023C Subordinated Bonds not less than the 10th day next preceding the proposed Conversion Date, provided that no notice need be given for a Conversion Date occurring on the Business Day following the last day of a Flexible Rate Period, an Index Rate Period or a Term Rate Period or on a Substitution Date. Such notice shall state: (1) the proposed Conversion Date; (2) that the 2023C Subordinated Bonds will be subject to mandatory tender for purchase on the proposed Conversion Date (regardless of whether all of the conditions to the change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period are satisfied); and (3) the Purchase Price of the 2023C Subordinated Bonds and the place of delivery for purchase of the 2023C Subordinated Bonds; provided that, if the proposed change is from one Direct Purchase Index Rate Period to a new Direct Purchase Index Rate Period and any Holder of the 2023C Subordinated Bonds shall continue to be a Holder of 2023C Subordinated Bonds

in the new Direct Purchase Index Rate Period, the Holder may elect to retain its 2023C Subordinated Bonds by filing with the District and the Trustee not less than five days prior to the proposed Conversion Date a written notice identifying such 2023C Subordinated Bonds and the principal amount it wishes to retain.

(ii) Determination of Interest Rates. The New Mode shall commence on the Conversion Date and the interest rate(s) (together, in the case of a change to the Flexible Mode, with the Interest Period(s)) shall be determined in the manner provided in Sections 82.05, 82.06, 82.07, 82.09 and 82.10, as applicable; provided, however, that, in the case of a change to the Term Rate Mode, or from one Term Rate Period to a new Term Rate Period, if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to sell some or all of the 2023C Subordinated Bonds at a premium or a discount to par.

(iii) Conditions Precedent.

(1) The Conversion Date shall be:

(A) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2023C Subordinated Bonds end;

(B) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(C) in the case of a change from the Term Rate Mode to another Interest Rate Mode, or from one Term Rate Period to a new Term Rate Period, any day on which the applicable 2023C Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(D) in the case of a change from the Index Mode to another Interest Rate Mode, or from one Index Rate Period to a new Index Rate Period, any day on which the applicable 2023C Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(E) in the case of a change from the Direct Purchase Index Mode or from one Direct Purchase Index Rate Period to another Direct Purchase Index Rate Period, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(2) If the 2023C Subordinated Bonds to be converted are Flexible Rate Bonds, no Interest Period with respect to such 2023C Subordinated Bonds set after delivery by the

District to the Remarketing Agent of the notice of the intention to effect a change in Interest Rate Mode shall extend beyond the proposed Conversion Date.

(3) The following items shall have been delivered to the District and the Trustee on or prior to the Conversion Date:

(A) a Favorable Opinion of Bond Counsel dated the Conversion Date; and

(B) if there is to be a Liquidity Facility or an Alternate Liquidity Facility or Credit Enhancement or an Alternate Credit Enhancement delivered in connection with such change, the items required by Section 84.08(d).

(4) If no Liquidity Facility is in effect to provide funds for the purchase of 2023C Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 84.04 shall not be less than the amount required to purchase all of the 2023C Subordinated Bonds on the Conversion Date at the Purchase Price.

(b) Change to Fixed Rate Mode. At the option of the District, the Interest Rate Mode for the 2023C Subordinated Bonds may be changed to the Fixed Rate Mode as provided in this Section 82.11(b). On any Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2023C Subordinated Bonds before the proposed Conversion Date pursuant to clause (ii) of this subsection (b), the District shall give written notice to the Notice Parties stating that the Interest Rate Mode will be changed to the Fixed Rate Mode and setting forth the proposed Conversion Date. In addition, such notice shall state whether some or all of the 2023C Subordinated Bonds to be converted shall be converted to Serial Bonds and, if so, the applicable Serial Maturity Dates and Serial Payments, all as determined pursuant to clause (v) of this subsection (b). Any such change in Interest Rate Mode shall be made as follows:

(i) Conversion Date. The Conversion Date shall be:

(1) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2023C Subordinated Bonds end;

(2) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(3) in the case of a change from the Term Rate Mode, any day on which the applicable 2023C Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(4) in the case of a change from the Index Mode, any day on which the applicable 2023C Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(5) in the case of a change from the Direct Purchase Index Mode, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(ii) Notice to Holders. Not less than the 10th day next preceding the Conversion Date, the Trustee shall mail, in the name of the District, a notice of such proposed change to the Holders of the 2023C Subordinated Bonds stating that the Interest Rate Mode will be changed to the Fixed Rate Mode, the proposed Conversion Date and that such Holder is required to tender such Holder's 2023C Subordinated Bonds for purchase on such proposed Conversion Date.

(iii) General Provisions Applying to Change to Fixed Rate Mode. The change to the Fixed Rate Mode shall not occur unless the following items shall have been delivered to the District and the Trustee and the following conditions shall have been satisfied, in each case on or prior to the Conversion Date:

- (1) a Favorable Opinion of Bond Counsel dated the Conversion Date;
- (2) if there is to be Credit Enhancement or Alternate Credit Enhancement delivered in connection with such change, the items required by Section 84.08(d) in connection with the delivery of Credit Enhancement or Alternate Credit Enhancement; and
- (3) if no Liquidity Facility is in effect to provide funds for the purchase of 2023C Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 84.04 shall not be less than the amount required to purchase all of the 2023C Subordinated Bonds on the Conversion Date at the Purchase Price.

(iv) Determination of Interest Rate. The Fixed Rate (or Fixed Rates in the case of Serial Bonds) for the 2023C Subordinated Bonds to be converted to the Fixed Rate Mode shall be established by the Remarketing Agent on the Rate Determination Date applicable thereto pursuant to the provisions of Section 82.07(b). Such Fixed Rate or Fixed Rates shall remain in effect until the Maturity Date or Serial Maturity Dates, as applicable, of such 2023C Subordinated Bonds. Such determination shall be conclusive and binding upon the District, the Trustee, the Credit Provider, if any, and the Holders of the 2023C Subordinated Bonds to which such rate will be applicable. Not later than 5:00 p.m. on the date of determination of the Fixed Rate, the Remarketing Agent shall notify the District, the Trustee and the Credit Provider, if any, of such rate by telephone.

(v) Serialization and Sinking Fund Account Redemption; Price. Upon conversion of the 2023C Subordinated Bonds to the Fixed Rate Mode, the 2023C Subordinated Bonds shall be remarketed at par, shall mature on the same Maturity Date and be subject to the same mandatory sinking fund account redemption, if any, and optional redemption provisions as set forth in this Fourteenth Supplemental Resolution prior to the conversion; provided, however, that if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to (1) have some of the 2023C Subordinated Bonds be Serial Bonds and some subject to mandatory sinking fund

account redemption even if such 2023C Subordinated Bonds were not Serial Bonds or subject to mandatory sinking fund account redemption prior to such change, (2) change the optional redemption dates and/or premiums set forth in Section 83.03(b), and/or (3) sell some or all of the 2023C Subordinated Bonds at a premium or a discount to par.

(c) Failure to Satisfy Conditions Precedent to an Interest Rate Mode Change.

In the event the conditions described above in subsections (a) or (b), as applicable, of this Section have not been satisfied by the applicable Conversion Date, then the New Mode shall not take effect (although any mandatory tender shall be made on such date if notice has been sent to the Holders stating that such 2023C Subordinated Bonds would be subject to mandatory purchase on such date). If the failed change in Interest Rate Mode was from the Flexible Mode, such 2023C Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the failed Conversion Date in accordance with Section 82.05. If the failed change in Interest Rate Mode was from the Daily Mode, such 2023C Subordinated Bonds shall remain in the Daily Mode, and if the failed change in Interest Rate Mode was from the Weekly Mode, such 2023C Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in accordance with the applicable provisions of Section 82.06 on and as of the failed Conversion Date. If the failed change in Interest Rate Mode was from the Term Rate Mode, then such 2023C Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 82.07. If the failed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2023C Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 82.09. If the failed change in Interest Rate Mode was from the Index Mode, then the 2023C Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 82.10.

(d) Rescission of Election. Notwithstanding anything herein to the contrary,

the District may rescind any election by it to change an Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period as described above prior to the Conversion Date by giving written notice thereof to the Notice Parties prior to 10:00 a.m. on the Business Day preceding such Conversion Date. If the Trustee receives notice of such rescission prior to the time the Trustee has given notice to the Holders of the 2023C Subordinated Bonds, then such notice of change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be of no force and effect. If the Trustee receives notice from the District of rescission of a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period after the Trustee has given notice thereof to the Holders of the 2023C Subordinated Bonds, then, if the proposed Conversion Date would have been a Mandatory Purchase Date, such date shall continue to be a Mandatory Purchase Date and the Interest Rate Mode for the 2023C Subordinated Bonds shall be determined as set forth in the remainder of this paragraph. If the proposed change in Interest Rate Mode was from the Flexible Mode, such 2023C Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the proposed Conversion Date in accordance with Section 82.05. If the proposed change in Interest Rate Mode was from the Daily Mode, such 2023C Subordinated Bonds shall remain in the Daily Mode, and if the proposed change in Interest Rate Mode was from the Weekly Mode, such 2023C Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in

accordance with the applicable provisions of Section 82.06 on and as of the proposed Conversion Date. If the proposed change in Interest Rate Mode was from the Term Rate Mode, then such 2023C Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 82.07. If the proposed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2023C Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 82.09. If the proposed change in Interest Rate Mode was from the Index Mode, then the 2023C Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 82.10.

ARTICLE LXXXIII

REDEMPTION OF 2023C SUBORDINATED BONDS

Section 83.01. Optional Redemption of Flexible Rate Bonds. 2023C Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2023C Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Section 83.02. Optional Redemption of 2023C Subordinated Bonds in the Daily Mode and the Weekly Mode. 2023C Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 83.03. Optional Redemption of 2023C Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

(a) 2023C Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2023C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2023C Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2023C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(b) 2023C Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2023C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(c) The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2023C Subordinated Bonds so changed to a Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

(d) Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2023C Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Section 83.04. Optional and Mandatory Redemption of 2023C Subordinated Bonds in the Direct Purchase Index Mode.

(a) Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2023C Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

(b) 2023C Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 83.05. Mandatory Sinking Fund Account Redemption of 2023C Subordinated Bonds and Redemption of Liquidity Provider Bonds.

(a) The 2023C Subordinated Bonds shall be subject to redemption prior to maturity from mandatory sinking fund account payments for the 2023C Subordinated Bonds on the dates, if any, specified in the Sales Certificate, at a Redemption Price equal to the principal amount of the 2023C Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The mandatory sinking fund account payments for the 2023C Subordinated Bonds shall be in the amounts and payable on the dates set forth in the Sales Certificate.

(b) Notwithstanding anything herein to the contrary, Liquidity Provider Bonds are subject to redemption on the dates, in the amounts and otherwise in accordance with the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

Section 83.06. Funds for Redemption of 2023C Subordinated Bonds. Unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023C Subordinated Bonds, the Redemption Price of 2023C Subordinated Bonds

(other than Liquidity Provider Bonds) shall be paid solely from (1) moneys obtained from a drawing on the Credit Enhancement supporting the 2023C Subordinated Bonds pursuant to Section 84.08(a) or (2) Available Moneys.

Section 83.07. Selection of 2023C Subordinated Bonds for Redemption.

Whenever provision is made for the redemption of less than all of the 2023C Subordinated Bonds of any one maturity, the Trustee shall select the 2023C Subordinated Bonds to be redeemed, from the Outstanding 2023C Subordinated Bonds of such maturity not previously called for redemption, by lot in any manner which the Trustee deems fair; provided, however, that Liquidity Provider Bonds shall be redeemed prior to the redemption of other 2023C Subordinated Bonds; provided further, however, that during a Direct Purchase Index Rate Period, the 2023C Subordinated Bonds shall be redeemed pro rata. The Trustee shall promptly notify the District in writing of the numbers of the 2023C Subordinated Bonds so selected for redemption.

Section 83.08. Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2023C Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2023C Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023C Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2023C Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2023C Subordinated Bonds to be redeemed, and shall also state that the interest on the 2023C Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023C Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2023C Subordinated Bonds to be redeemed.

Notice of optional redemption shall be given by the Trustee for and on behalf of the District, at the written request of the District (which request shall be given to the Trustee (unless waived by the Trustee) at least twenty-five (25) days prior to the date fixed for redemption or such shorter period as is acceptable to the Trustee). Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption.

Notwithstanding the foregoing, notice of redemption shall not be required for 2023C Subordinated Bonds redeemed on a Mandatory Purchase Date.

Section 83.09. Partial Redemption of 2023C Subordinated Bond. Upon surrender of any 2023C Subordinated Bond redeemed in part only, the District shall execute and the Trustee shall deliver to the registered owner thereof, at the expense of the District, a new 2023C Subordinated Bond or Bonds, of the same maturity, of Authorized Denominations in

aggregate principal amount equal to the unredeemed portion of the 2023C Subordinated Bond surrendered.

Section 83.10. Effect of Redemption. Notice of redemption having been duly given as aforesaid, and moneys for payment of the Redemption Price being held by the Trustee, the 2023C Subordinated Bonds so to be redeemed shall, on the date designated in such notice, become due and payable at the Redemption Price specified in such notice; and from and after the date so designated interest on the 2023C Subordinated Bonds so designated for redemption shall cease to accrue and the Holders and Beneficial Owners of said 2023C Subordinated Bonds shall have no rights in respect thereof, except to receive payment of the Redemption Price thereof.

Section 83.11. Disposition of Redeemed 2023C Subordinated Bonds. All 2023C Subordinated Bonds redeemed pursuant to the provisions of this Article LXXXIII shall be delivered to and cancelled by the Trustee and shall thereafter be delivered by the Trustee to, or upon the order of, the District, and no 2023C Subordinated Bonds shall be issued in place thereof.

ARTICLE LXXXIV

PURCHASE OF 2023C SUBORDINATED BONDS

Section 84.01. Optional Tenders of 2023C Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 84.06, the Beneficial Owners of 2023C Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2023C Subordinated Bonds (or portions of those 2023C Subordinated Bonds, provided that no 2023C Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Section 84.02. Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode.

(a) The 2023C Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2023C Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2023C Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2023C Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2023C

Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

(b) Notwithstanding subparagraph (a) above and anything to the contrary in this Fourteenth Supplemental Resolution, in the event the 2023C Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2023C Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2023C Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing, in which case the 2023C Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2023C Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2023C Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2023C Subordinated Bonds may be subject to optional redemption or purchase at the sole option of the District at any time with notice as and to the extent provided in the Continuing Covenant Agreement.

Section 84.03. Remarketing of 2023C Subordinated Bonds; Notices.

(a) Remarketing of 2023C Subordinated Bonds. The Remarketing Agent shall use its best efforts pursuant to the terms and conditions of the Remarketing Agreement to offer for sale:

(i) all 2023C Subordinated Bonds or portions thereof as to which a Tender Notice has been delivered pursuant to Section 84.01; and

(ii) all 2023C Subordinated Bonds required to be purchased on a Mandatory Purchase Date described in clauses (i), (ii), (iii), (iv), (viii) or (ix) of the definition thereof; and

(iii) any Liquidity Provider Bonds (A) purchased on a Purchase Date described in clause (i) or (ii) above, (B) with respect to which the Liquidity Provider has provided notice to the Trustee and the Remarketing Agent that it has reinstated the Available Amount, (C) with respect to which an Alternate Liquidity Facility and Alternate Credit Enhancement is in effect (if such funds were secured by a Credit Enhancement prior to becoming Liquidity Provider Bonds, which Credit Enhancement is no longer in effect), and/or (D) which are being marketed as Fixed Rate Bonds.

The Remarketing Agent shall not remarket 2023C Subordinated Bonds to the District or any affiliate thereof. In connection with the remarketing of any 2023C Subordinated Bonds with respect to which notice of redemption or notice of mandatory purchase has been

given, the Remarketing Agent shall notify each person to which such 2023C Subordinated Bonds are remarketed of such notice of redemption or notice of mandatory purchase.

Anything in this Fourteenth Supplemental Resolution to the contrary notwithstanding, if there shall have occurred and be continuing either a Credit Provider Failure or a Liquidity Provider Failure with respect to a Series of 2023C Subordinated Bonds, the Remarketing Agent shall not remarket such 2023C Subordinated Bonds. All other provisions of this Fourteenth Supplemental Resolution, including without limitation, those relating to the setting of interest rates and Interest Periods and mandatory and optional purchases, shall remain in full force and effect during the continuance of such Credit Provider Failure or Liquidity Provider Failure.

(b) Notice of Remarketing; Registration Instructions; New Bonds. On each date on which a 2023C Subordinated Bond is to be purchased pursuant to this Article LXXXIV:

(i) the Remarketing Agent shall notify the Trustee by Electronic Means by 11:30 a.m. if it has been unable to remarket any tendered 2023C Subordinated Bonds, and shall include in such notice the principal amount of 2023C Subordinated Bonds it has been unable to remarket;

(ii) the Remarketing Agent shall notify the Trustee by Electronic Means not later than 1:00 p.m. of the names of the purchasers of the successfully remarketed 2023C Subordinated Bonds and such information as may be necessary to register the 2023C Subordinated Bonds and the registration instructions with respect thereto;

(iii) the Remarketing Agent shall cause the proceeds of the remarketing by such Remarketing Agent of tendered 2023C Subordinated Bonds to be paid to the Trustee in immediately available funds not later than 12:00 noon on the Purchase Date for such 2023C Subordinated Bonds; and

(iv) if the 2023C Subordinated Bonds are not in the Book-Entry System, the Trustee shall authenticate new 2023C Subordinated Bonds for the respective purchasers thereof which shall be available for pick-up by the Remarketing Agent not later than 2:30 p.m.

(c) Draw on Liquidity Facility or Request for Funds. On each date on which a 2023C Subordinated Bond is to be purchased pursuant to this Article LXXXIV, if (i) the Remarketing Agent shall have given notice to the Trustee pursuant to clause (b)(i) above that it has been unable to remarket any of the 2023C Subordinated Bonds or (ii) the Trustee has not received from the Remarketing Agent an amount sufficient to pay the Purchase Price of tendered Bonds, by 12:00 noon on the Purchase Date, then the Trustee shall draw on the applicable Liquidity Facility (or if no Liquidity Facility, request funds from the District) by 12:15 p.m. in an amount equal to the Purchase Price of all such 2023C Subordinated Bonds which have not been successfully remarketed, requesting payment not later than 2:45 p.m. on the Purchase Date. Subject to Section 84.04, if a Liquidity Facility is in effect, the Trustee shall also give the District notice by 2:45 p.m. on the Purchase Date if it does not have funds in the Remarketing Proceeds

Account and the Liquidity Facility Purchase Account sufficient to pay the Purchase Price of 2023C Subordinated Bonds tendered on such Purchase Date. Any draw on a Liquidity Facility to be made on a Substitution Date shall be on the Liquidity Facility being replaced.

Section 84.04. Source of Funds for Purchase of 2023C Subordinated Bonds.

By 3:00 p.m. on the date on which a 2023C Subordinated Bond is to be purchased pursuant to this Article LXXXIV, and except as set forth in Section 84.06(b)(ii), the Trustee shall purchase tendered 2023C Subordinated Bonds from the tendering Holders at the applicable Purchase Price by wire transfer in immediately available funds. Funds for the payment of such Purchase Price shall be derived solely from the following sources in the order of priority indicated and neither the Trustee nor the Remarketing Agent shall be obligated to provide funds from any other source:

(a) immediately available funds on deposit in the Remarketing Proceeds Account established for the 2023C Subordinated Bonds;

(b) immediately available funds on deposit in the Liquidity Facility Purchase Account established for the 2023C Subordinated Bonds; and

(c) moneys of the District on deposit in the District Purchase Account established for the 2023C Subordinated Bonds.

If no Liquidity Facility is in effect with respect to the 2023C Subordinated Bonds, then the District shall be obligated to deposit amounts into the District Purchase Account established for the 2023C Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023C Subordinated Bonds are insufficient therefor. If a Liquidity Facility is in effect with respect to the 2023C Subordinated Bonds, then the District may, but shall not be obligated to, deposit amounts into the District Purchase Account established for the 2023C Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023C Subordinated Bonds and the Liquidity Facility Purchase Account established for the 2023C Subordinated Bonds are insufficient therefor. If so specified in the Sales Certificate with respect to the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period, the failure of the District to deposit amounts into the District Purchase Account when the District is obligated to deposit such amounts under this Section 84.04 shall constitute an “event of default” under Section 9.01 of the Subordinate Master Resolution.

Section 84.05. Delivery of Subordinated Bonds. On each date on which a 2023C Subordinated Bond is to be purchased pursuant to this Article LXXXIV, such 2023C Subordinated Bond shall be delivered as follows:

(a) 2023C Subordinated Bonds sold by the Remarketing Agent and described in Section 84.04(a) shall be delivered by the Remarketing Agent to the purchasers of such 2023C Subordinated Bonds by 3:00 p.m.;

(b) 2023C Subordinated Bonds purchased by the Trustee with moneys described in Section 84.04(b) shall be registered immediately in the name of the Liquidity

Provider or its nominee (which may be the Securities Depository) or as otherwise specified in writing by the Liquidity Provider and held as specified in writing by the Liquidity Provider, in either case on or before 3:00 p.m.; and

(c) 2023C Subordinated Bonds purchased by the District with moneys described in Section 84.04(c) shall be registered immediately in the name of the District or its nominee on or before 3:00 p.m. 2023C Subordinated Bonds so owned by the District shall continue to be Outstanding under the terms of the Subordinate Master Resolution and be subject to all of the terms and conditions of the Subordinate Master Resolution and shall be subject to remarketing by the Remarketing Agent.

When any Liquidity Provider Bonds are remarketed, the Trustee shall not release 2023C Subordinated Bonds so remarketed to the Remarketing Agent until the Trustee has received confirmation that the Liquidity Facility has been reinstated.

Section 84.06. Book-Entry Tenders.

(a) Notwithstanding any other provision of this Article LXXXIV to the contrary, all tenders for purchase during any period in which the 2023C Subordinated Bonds are registered in the name of any Securities Depository or its nominee shall be subject to the terms and conditions set forth in the Representations Letter and to any regulations promulgated by the Securities Depository. During any period that the 2023C Subordinated Bonds are registered in the name of DTC or its nominee, the tender option rights of holders of 2023C Subordinated Bonds may be exercised only by a Direct Participant of DTC acting, directly or indirectly, on behalf of a Beneficial Owner of 2023C Subordinated Bonds by giving notice of its election to tender 2023C Subordinated Bonds or portions thereof at the times and in the manner described above. Beneficial Owners will not have any rights to tender 2023C Subordinated Bonds directly to the Trustee. Procedures under which a Beneficial Owner may direct a Direct Participant or DTC, or an Indirect Participant of DTC acting through a Director Participant of DTC, to exercise a tender option right in respect of 2023C Subordinated Bonds or portions thereof in an amount equal to all or a portion of such Beneficial Owner's beneficial ownership interest therein shall be governed by standing instructions and customary practices determined by such Direct Participant or Indirect Participant. During any period that the 2023C Subordinated Bonds are registered in the name of DTC or its nominee, delivery of 2023C Subordinated Bonds required to be tendered for purchase shall be effected by the transfer by a Direct Participant on the applicable Purchase Date of a book-entry credit to the account of the Trustee of a beneficial ownership interest in such 2023C Subordinated Bonds.

(b) Notwithstanding anything expressed or implied herein to the contrary, during any period that a Book-Entry System for the 2023C Subordinated Bonds is maintained by the District:

(i) there shall be no requirement of physical delivery to or by the Trustee or the Remarketing Agent of:

(1) any 2023C Subordinated Bonds subject to mandatory or optional purchase as a condition to the payment of the Purchase Price therefor;

(2) any 2023C Subordinated Bonds that have become Liquidity Provider Bonds; or

(3) any remarketing proceeds of such 2023C Subordinated Bonds or Liquidity Provider Bonds; and

(ii) except as provided in (iii) below, neither the Trustee nor the Paying Agent shall have any responsibility for paying the Purchase Price of any tendered 2023C Subordinated Bond or for remitting remarketing proceeds to any Person; and

(iii) the Trustee's sole responsibilities in connection with the purchase and remarketing of a tendered 2023C Subordinated Bond shall be to:

(1) draw upon the Liquidity Facility to pay the Purchase Price of 2023C Subordinated Bond in the manner provided herein and to remit the amount so drawn to or upon the order of the Securities Depository for the benefit of the tendering Beneficial Owners; and

(2) remit any proceeds derived from the remarketing of a Liquidity Provider Bond and any unused proceeds from a drawing on the Liquidity Facility to the Liquidity Provider.

Section 84.07. No Book-Entry System. During any period that the 2023C Subordinated Bonds shall not be in a Book-Entry System, the following procedures shall be followed:

(a) 2023C Subordinated Bonds shall be delivered (with all necessary endorsements) at or before 12:00 noon on the Purchase Date at the office of the Paying Agent in New York, New York; provided, however, that payment of the Purchase Price shall be made pursuant to this Section only if the 2023C Subordinated Bond so delivered to the Paying Agent conforms in all respects to the description thereof in the notice described in this Section. Payment of the Purchase Price with respect to purchases under this Section shall be made to the Holders of tendered 2023C Subordinated Bonds by wire transfer in immediately available funds by the Paying Agent by 3:00 p.m. on the Purchase Date.

(b) If a 2023C Subordinated Bond to be purchased pursuant to this Article LXXXIV is not delivered by the Holder to the Paying Agent by 12:00 noon on the date in which such 2023C Subordinated Bond is to be purchased, the Paying Agent shall hold any funds received for the purchase of those 2023C Subordinated Bonds in trust in a separate account and shall pay such funds to the former Holders of the 2023C Subordinated Bonds upon presentation of the 2023C Subordinated Bonds. Such undelivered 2023C Subordinated Bonds shall cease to accrue interest as to the former Holders on such purchase date and moneys representing the Purchase Price shall be available against delivery of those 2023C Subordinated Bonds at the Principal Office of the Paying Agent; provided, however, that any funds which shall be so held by the Paying Agent and which remain unclaimed by the former Holder of a 2023C Subordinated Bond not presented for purchase for a period of two years after delivery of such funds to the Paying Agent, shall, to the extent permitted by law, upon request in writing by the District and the furnishing of security or indemnity to the Paying Agent's satisfaction, be paid to the District free of any trust or lien and thereafter the former Holder of such 2023C Subordinated

Bond shall look only to the District and then only to the extent of the amounts so received by the District without any interest thereon and the Paying Agent shall have no further responsibility with respect to such moneys or payment of the Purchase Price of such 2023C Subordinated Bonds. The Paying Agent shall authenticate a replacement 2023C Subordinated Bond for any undelivered 2023C Subordinated Bond which may then be remarketed by the Remarketing Agent.

(c) The Paying Agent shall hold all 2023C Subordinated Bonds properly tendered to it for purchase hereunder as agent and bailee of, and in escrow for the benefit of, the respective Holders of the 2023C Subordinated Bonds which shall have so tendered such 2023C Subordinated Bonds until moneys representing the Purchase Price of such 2023C Subordinated Bonds shall have been delivered to or for the account of or to the order of such Holders.

Section 84.08. Credit Enhancement and Liquidity Facility.

(a) While a Credit Enhancement is in effect with respect to the 2023C Subordinated Bonds, the Trustee shall, on the Business Day preceding each Interest Payment Date and Principal Payment Date draw on the Credit Enhancement in accordance with the terms thereof so as to receive thereunder with respect to the 2023C Subordinated Bonds secured by the Credit Enhancement by 1:00 p.m. on said Interest Payment Date and Principal Payment Date, an amount, in immediately available funds, equal to the amount of interest and principal payable on such 2023C Subordinated Bonds on such Interest Payment Date and Principal Payment Date. The proceeds of such draws shall be deposited in a separate account in the Subordinated Bond Interest and Principal Fund and shall be applied to pay principal of and interest on such 2023C Subordinated Bonds prior to the application of any other funds held by the Trustee therefor. Amounts held in such account shall be held uninvested and separate and apart from all other funds and accounts. Such accounts shall at all times be Eligible Accounts.

(b) If a Liquidity Facility is in effect with respect to the 2023C Subordinated Bonds, on each date on which a 2023C Subordinated Bond is to be purchased, the Trustee, by demand given by Electronic Means by 12:15 p.m., shall draw on the Liquidity Facility in accordance with the terms thereof so as to receive thereunder by 2:45 p.m. on such date an amount, in immediately available funds, sufficient, together with the proceeds of the remarketing of such 2023C Subordinated Bonds on such date, to enable the Trustee to pay the Purchase Price in connection therewith. The Trustee shall deposit said proceeds in the Liquidity Facility Purchase Account established for the 2023C Subordinated Bonds pursuant to Section 84.09(b) hereof.

(c) Notwithstanding the foregoing paragraphs of this Section, if the Credit Provider and the Liquidity Provider are the same entity, the Trustee shall not draw on the Credit Enhancement with respect to any payments due or made in connection with Liquidity Provider Bonds. In no event shall the Trustee draw on the Credit Enhancement or Liquidity Facility with respect to any payments made or made in connection with 2023C Subordinated Bonds not covered by the Credit Enhancement or Liquidity Facility or 2023C Subordinated Bonds owned by the District.

(d) The District may provide an Alternate Credit Enhancement or Alternate Liquidity Facility on any day on which 2023C Subordinated Bonds to be secured by such Alternate Credit Enhancement or Alternate Liquidity Facility are subject to redemption at par and not later than the fifth (5th) Business Day prior to the Expiration Date of the Credit Enhancement or Liquidity Facility then in effect and supporting such 2023C Subordinated Bonds. The District shall give the Notice Parties written notice of the proposed substitution of an Alternate Credit Enhancement or Alternate Liquidity Facility no less than two (2) Business Days prior to the date on which the Trustee is required to provide notice of the proposed substitution to the Holders of the 2023C Subordinated Bonds. The Trustee shall give notice of such Substitution Date in accordance with Section 84.02. On or before the Substitution Date there shall be delivered to the Trustee (i) the Alternate Credit Enhancement or the Alternate Liquidity Facility in substitution for the Credit Enhancement or Liquidity Facility then in effect, (ii) a Favorable Opinion of Bond Counsel, (iii) a written Opinion of Counsel for the provider of the Alternate Credit Enhancement or Alternate Liquidity Facility, as applicable, to the effect that such Alternate Credit Enhancement or Alternate Liquidity Facility is a valid, legal and binding obligation of the provider thereof, and (iv) unless waived by such entity, written evidence satisfactory to the Credit Provider and the Liquidity Provider of the provision for purchase from the Liquidity Provider of all Liquidity Provider Bonds, at a price equal to the principal amount thereof plus accrued and unpaid interest, and payment of all amounts due to the Credit Provider and the Liquidity Provider under the applicable Reimbursement Agreement or Liquidity Facility on or before the effective date of such Alternate Credit Enhancement or Alternate Liquidity Facility. Upon the satisfaction of the conditions described in the preceding sentence, the Trustee shall accept such Alternate Credit Enhancement or Alternate Liquidity Facility on the close of business on the Substitution Date and shall surrender the Credit Enhancement or Liquidity Facility then in effect to the provider thereof on the Substitution Date; provided, however, that the Trustee shall not surrender the Credit Enhancement or Liquidity Facility then in effect unless and until the Trustee has received all amounts drawn thereunder. If any condition to the substitution is not satisfied, the substitution shall not occur but the 2023C Subordinated Bonds shall remain subject to mandatory purchase on the proposed Substitution Date.

(e) In the event of an extension of the Expiration Date, the District shall give to the Notice Parties, a written notice of the new Expiration Date at least fifteen (15) days prior to the fifth Business Day prior to the Expiration Date in effect prior to such extension.

(f) The references to Credit Enhancement and Liquidity Facility and Credit Provider and Liquidity Provider shall be disregarded during any period during which a Credit Enhancement or Liquidity Facility, as applicable, is not in effect.

(g) The Trustee shall not have any lien on or security interest in any amounts drawn under a Credit Enhancement or a Liquidity Facility or any amounts on deposit in the account described in Section 84.08(a) above in which proceeds of draws on a Credit Enhancement are deposited or a Liquidity Facility Purchase Account.

(h) If at any time during the term of a Credit Enhancement and/or Liquidity Facility any successor Trustee shall be appointed and qualified under the Subordinate Master Resolution, the resigning or removed Trustee shall request that the Credit Provider and/or Liquidity Provider, as applicable, transfer such Credit Enhancement and/or Liquidity Facility to

the successor Trustee and such resignation or removal of the Trustee shall not be effective until the Credit Enhancement and/or Liquidity Facility has been duly transferred (including the payment of any required transfer fee) to such successor Trustee. If the resigning or removed Trustee fails to make this request, the successor Trustee shall do so before accepting appointment.

(i) The Trustee may accept, hold and draw upon a Credit Enhancement and/or a Liquidity Facility issued by itself or by any of its corporate affiliates to provide security and a source of payment for the 2023C Subordinated Bonds. The Trustee covenants that it shall at all times maintain adequate controls to manage any potential conflict of interest. Notwithstanding any other provision herein to the contrary, while the Credit Provider and/or Liquidity Provider is the Trustee or an affiliate of the Trustee and such Credit Provider and/or Liquidity Provider has not failed to honor a properly presented draw on the Credit Enhancement and/or Liquidity Facility, the Trustee shall have no discretion with respect to the acceleration of the 2023C Subordinated Bonds and shall do so only upon the written direction of such Credit Provider and/or Liquidity Provider and as otherwise permitted by the Subordinate Master Resolution. The Trustee shall immediately tender its resignation and take prompt steps to have a successor trustee appointed satisfying the requirements of the Subordinate Master Resolution if such affiliated Credit Provider and/or Liquidity Provider shall fail at any time to honor a properly presented and conforming draw on the Credit Enhancement and/or Liquidity Facility.

Section 84.09. Purchase Fund. There is hereby established and there shall be maintained with the Trustee a separate fund to be known as the “Purchase Fund.” The Trustee shall further establish separate accounts within the Purchase Fund to be known as the “Liquidity Facility Purchase Account”, the “Remarketing Proceeds Account” and the “District Purchase Account”. At any time at which there is a Liquidity Facility in effect with respect to the 2023C Subordinated Bonds, the Purchase Fund shall be required to be an Eligible Account.

(a) Remarketing Proceeds Account. Upon receipt of the proceeds of a remarketing of a 2023C Subordinated Bond on the date such 2023C Subordinated Bond is to be purchased, the Trustee shall deposit such proceeds in the Remarketing Proceeds Account for application to the Purchase Price of such 2023C Subordinated Bond. Notwithstanding the foregoing, upon the receipt of the proceeds of a remarketing of Liquidity Provider Bonds, the Trustee shall immediately pay such proceeds to the Liquidity Provider to the extent of any amount owing to the Liquidity Provider.

(b) Liquidity Facility Purchase Account. Upon receipt of the immediately available funds pursuant to Section 84.08(b), the Trustee shall deposit such money in the Liquidity Facility Purchase Account for application to the Purchase Price of the 2023C Subordinated Bonds to the extent that the moneys on deposit in the Remarketing Proceeds Account shall not be sufficient. Any amounts deposited in the Liquidity Facility Purchase Account and not needed with respect to the Purchase Price of any 2023C Subordinated Bonds shall be immediately returned to the Liquidity Provider.

(c) District Purchase Account. Upon receipt of funds from the District pursuant to Section 84.04, the Trustee shall deposit such funds in the District Purchase Account for application to the Purchase Price of the 2023C Subordinated Bonds. Any amounts deposited

in the District Purchase Account and not needed with respect to the Purchase Price for any 2023C Subordinated Bonds shall be immediately returned to the District.

(d) Investment. Amounts held in the Liquidity Facility Purchase Account, the Remarketing Proceeds Account and the District Purchase Account by the Trustee shall be held uninvested and separate and apart from all other funds and accounts.

Section 84.10. Inadequate Funds for Tenders.

(a) If moneys sufficient to pay the Purchase Price of all Tendered Bonds to be purchased on any Purchase Date are not available (1) no purchase shall be consummated of Tendered Bonds on such Purchase Date; (2) all Tendered Bonds shall be returned to the Holders thereof; and (3) all remarketing proceeds with respect to the 2023C Subordinated Bonds shall be returned to the Remarketing Agent for return to the Persons providing such moneys. Thereafter, the Trustee shall continue to take all such action available to it to obtain remarketing proceeds with respect to all Tendered Bonds from the Remarketing Agent and sufficient other funds from the Liquidity Provider, if any, or, subject to Section 84.04, the District to effect a subsequent successful remarketing or purchase of any Tendered Bonds.

(b) All Tendered Bonds (other than Liquidity Provider Bonds and 2023C Subordinated Bonds in the Direct Purchase Index Mode) shall bear interest at the Maximum Rate (or such lower interest rate or rates specified in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period) during the period of time from and including the applicable Purchase Date to (but not including) the date that all such Tendered Bonds are successfully remarketed, redeemed, purchased or paid (the “Delayed Remarketing Period”).

(c) The District may direct the conversion of the Tendered Bonds to a different Interest Rate Mode, Index Rate Period or Term Rate Period during the Delayed Remarketing Period in accordance with Section 82.11 hereof; provided that the District shall not be required to comply with the notice requirements described in Section 82.11.

(d) Subject to the terms of the Remarketing Agreement, if any, the Remarketing Agent shall continue to use its best efforts to remarket all of the Tendered Bonds at rates up to and including the Maximum Rate.

(e) During the Delayed Remarketing Period, the Trustee may, upon direction of the District, apply amounts on deposit in the Redemption Fund to the redemption of such Tendered Bonds, as a whole or in part on any Business Day during the Delayed Remarketing Period, at a redemption price equal to the principal amount thereof, together with interest accrued thereon to the date fixed for redemption, without premium. Notwithstanding Section 83.08 to the contrary, the Trustee shall give five Business Days’ notice of such redemption to the Holders of the 2023C Subordinated Bonds to be redeemed.

(f) During the Delayed Remarketing Period, interest on such Tendered Bonds (other than 2023C Subordinated Bonds in the Direct Purchase Index Mode) shall be paid to the Holders thereof (i) on the first Business Day of each calendar month occurring during the Delayed Remarketing Period and (ii) on the last day of the Delayed Remarketing Period.

ARTICLE LXXXV

REMARKETING AGENT

Section 85.01. Appointment of Remarketing Agent.

(a) The Remarketing Agent shall be appointed pursuant to the Remarketing Agreement to remarket 2023C Subordinated Bonds pursuant to this Fourteenth Supplemental Resolution and perform the other duties of the Remarketing Agent described hereunder, and to keep such books and records as shall be consistent with prudent industry practice and to make such books and records available for inspection by the District and the Trustee at all reasonable times. The Remarketing Agent shall act as such under the Remarketing Agreement.

(b) The Remarketing Agent may at any time resign and be discharged of the duties and obligations created by this Fourteenth Supplemental Resolution as set forth in the Remarketing Agreement. The Remarketing Agent may suspend its remarketing efforts as set forth in the Remarketing Agreement. The Remarketing Agent may be removed at any time, at the direction of the District as set forth in the Remarketing Agreement. Any successor Remarketing Agent shall be selected by the District, and shall be a member of the Financial Industry Regulatory Authority, or its successors, shall have a capitalization of at least fifteen million dollars (\$15,000,000), shall be authorized by law to perform all the duties set forth in this Fourteenth Supplemental Resolution and shall be acceptable to the Credit Provider and Liquidity Provider. The District's delivery to the Trustee of a certificate setting forth the effective date of the appointment of a successor Remarketing Agent and the name of such successor shall be conclusive evidence that (i) if applicable, the predecessor Remarketing Agent has been removed in accordance with the provisions of this Fourteenth Supplemental Resolution and (ii) such successor has been appointed and is qualified to act as Remarketing Agent under the terms of this Fourteenth Supplemental Resolution.

(c) If the Remarketing Agent consolidates with, merges or converts into, or transfers all or substantially all of its assets (or, in the case of a bank, national banking association or trust company, its corporate assets) to, another corporation, the resulting, surviving or transferee corporation without any further act shall be the successor Remarketing Agent.

ARTICLE LXXXVI

MISCELLANEOUS

Section 86.01. 2023C Subordinated Sinking Fund Account; Payments of Interest, Principal and Redemption Price and Defeasance While Credit Enhancement in Effect.

(a) An account is hereby established within the Subordinated Bonds Interest and Principal Fund to be designated the "Series 2023C Sinking Fund Account." The Treasurer shall deposit in the Series 2023C Sinking Fund Account the mandatory sinking fund account payments in the amounts, on the mandatory sinking fund account payment dates, set forth in

Section 83.05(a) and shall transfer such amounts to the Trustee on such date for application as provided in Section 86.01(b).

(b) On each mandatory sinking fund account payment date established for the 2023C Subordinated Bonds, the Trustee shall apply the mandatory sinking fund account payment required on that date to the redemption (or payment at maturity, as the case may be) of the 2023C Subordinated Bonds for which the mandatory sinking fund account payment has been made, upon the notice and in the manner provided in Section 83.08; provided that, at any time prior to giving such notice of such redemption, the Trustee shall, upon direction of the District, apply such moneys to the purchase of such 2023C Subordinated Bonds at public or private sale, as and when and at such prices (including brokerage and other charges, but excluding accrued interest) as the District may direct, except that the purchase price (excluding accrued interest) shall not exceed the par amount of such 2023C Subordinated Bonds. If, during the twelve-month period immediately preceding said mandatory sinking fund account payment date, the Trustee has purchased 2023C Subordinated Bonds with moneys in the Series 2023C Sinking Fund Account, or, during said period and prior to giving said notice of redemption, the District has deposited 2023C Subordinated Bonds with the Trustee, such 2023C Subordinated Bonds so purchased or deposited or redeemed shall be applied, to the extent of the full principal amount thereof, to reduce said mandatory sinking fund account payment. All 2023C Subordinated Bonds purchased or deposited pursuant to this subsection shall be cancelled and destroyed by the Trustee. All 2023C Subordinated Bonds purchased from the Series 2023C Sinking Fund Account or deposited by the District with the Trustee shall be allocated first to the next succeeding mandatory sinking fund account payment, then to the remaining mandatory sinking fund account payments as selected by the District.

(c) Any moneys remaining in the Series 2023C Sinking Fund Account after all 2023C Subordinated Bonds have been retired shall be returned to the District for any lawful District use.

(d) Notwithstanding the foregoing provisions of this Section 86.01 or Section 5.02 or any other provision of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023C Subordinated Bonds, the principal and Redemption Price of, and interest on, the 2023C Subordinated Bonds shall be paid solely (1) first, from moneys obtained from a drawing on the Credit Enhancement pursuant to Section 84.08(a) and (2) second, in the event moneys are not available pursuant to clause (1) for such purpose for any reason, from Available Moneys and moneys on deposit in the Series 2023C Sinking Fund Account shall be withdrawn by the Trustee and used solely for the purpose of reimbursing the Credit Provider for drawings under the Credit Enhancement. To the extent the Credit Provider honors a drawing under the Credit Enhancement for the purpose of paying the principal or Redemption Price of, or interest on, the 2023C Subordinated Bonds, the District shall receive a credit against its obligation to make deposits into the Subordinated Bonds Interest and Principal Fund and shall not be required to transfer funds to the Trustee in the amount of such drawing.

(e) Notwithstanding the provisions of Article X of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023C Subordinated Bonds, 2023C Subordinated

Bonds shall not be deemed defeased or otherwise paid or satisfied unless such 2023C Subordinated Bonds are defeased with (1) moneys obtained from a drawing on the Credit Enhancement pursuant to Section 84.08(a), (2) Available Moneys or (3) Defeasance Securities acquired with moneys described in (1) or (2). Any Defeasance Securities used to defease 2023C Subordinated Bonds for which Credit Enhancement is in effect shall be not callable by the issuer thereof prior to maturity and shall mature no later than the earlier of (x) the first day upon which such 2023C Subordinated Bonds may be tendered or (y) the first day upon which such 2023C Subordinated Bonds may be redeemed. For purpose of Article X of the Subordinate Master Resolution, interest on the 2023C Subordinated Bonds shall be calculated based on an assumed interest rate equal to the Maximum Rate for periods for which the actual interest rate on the 2023C Subordinated Bonds cannot be determined.

Section 86.02. Form and Execution of 2023C Subordinated Bonds. The 2023C Subordinated Bonds, and the certificate of authentication and registration to be executed thereon, shall be in substantially the form set forth as Exhibit A to this Fourteenth Supplemental Resolution.

The 2023C Subordinated Bonds shall be executed in the name and on behalf of the District with the manual or facsimile signature of the President or Vice President of its Board of Directors. The 2023C Subordinated Bonds shall then be delivered to the Trustee for authentication by it. In case any officer who shall have signed any of the 2023C Subordinated Bonds shall cease to be such officer of the District before the 2023C Subordinated Bonds so signed shall have been authenticated or delivered by the Trustee or issued by the District, such 2023C Subordinated Bonds may nevertheless be authenticated, delivered and issued and, upon such authentication, delivery and issue, shall be as binding upon the District as though those who signed the same had continued to be such officer of the District, and also any 2023C Subordinated Bond may be signed on behalf of the District by such person as at the actual date of execution of such 2023C Subordinated Bond shall be the proper officer of the District although at the nominal date of such 2023C Subordinated Bond any such person shall not have been such officer of the District.

Only such of the 2023C Subordinated Bonds as shall bear thereon a certificate of authentication substantially in the form set forth in Exhibit A to this Fourteenth Supplemental Resolution, manually executed by an authorized signatory of the Trustee, shall be valid or obligatory for any purpose or entitled to the benefits of the Subordinate Master Resolution, and such certificate of the Trustee shall be conclusive evidence that the 2023C Subordinated Bonds so authenticated have been duly executed, authenticated and delivered hereunder and are entitled to the benefits of the Subordinate Master Resolution.

Section 86.03. Issuance of 2023C Subordinated Bonds. At any time after the adoption of this Fourteenth Supplemental Resolution, the District may execute and deliver the 2023C Subordinated Bonds in the aggregate principal amount set forth in the Sales Certificate. The Trustee shall authenticate and deliver the 2023C Subordinated Bonds upon written order of the District. The proceeds of the sale of the 2023C Subordinated Bonds shall be deposited and applied as set forth in the Sales Certificate.

Section 86.04. Use of Depository. Notwithstanding any provision of the Subordinate Master Resolution or this Fourteenth Supplemental Resolution to the contrary:

(a) The 2023C Subordinated Bonds shall be initially issued as provided in Section 82.02; provided, that 2023C Subordinated Bonds in the Direct Purchase Index Mode shall be issued in definitive certificated form registered in the name of the Holder thereof or as otherwise directed by the Holder. 2023C Subordinated Bonds in any other Interest Rate Mode shall be registered in the name of Cede & Co. or as otherwise directed by the Securities Depository and registered ownership thereof, or any portion thereof, may not thereafter be transferred except:

(i) To any successor of DTC or its nominee, or to any substitute depository designated pursuant to clause (ii) of this subsection (a) (“substitute depository”); provided that any successor of DTC or substitute depository shall be qualified under any applicable laws to provide the service proposed to be provided by it;

(ii) To any substitute depository not objected to by the Trustee, upon (1) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository or (2) a determination by the District that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; provided that any such substitute depository shall be qualified under any applicable laws to provide the services proposed to be provided by it; or

(iii) To any person as provided below, upon (1) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository; provided that no substitute depository which is not objected to by the Trustee can be obtained or (2) a determination by the District that it is in the best interests of the District to remove DTC or its successor (or any substitute depository or its successor) from its functions as depository.

(b) In the case of any transfer pursuant to clause (i) or clause (ii) of subsection 86.04(a) hereof, upon receipt of all outstanding 2023C Subordinated Bonds by the Trustee, together with a Certificate of the District to the Trustee, a single new 2023C Subordinated Bond shall be executed and delivered for each maturity of 2023C Subordinated Bonds then outstanding registered in the name of such successor or such substitute depository, or their nominees, as the case may be, all as specified in such Certificate of the District. In the case of any transfer pursuant to clause (iii) of subsection 86.04(a) hereof, upon receipt of all outstanding 2023C Subordinated Bonds by the Trustee together with a Certificate of the District to the Trustee, new 2023C Subordinated Bonds shall be executed and delivered in such denominations and registered in the names of such persons as are requested in such a Certificate of the District, subject to the limitations of Section 86.04(a) hereof, provided the Trustee shall not be required to deliver such new 2023C Subordinated Bonds within a period less than 60 days from the date of receipt of such a Certificate of the District. Subsequent to any transfer pursuant to clause (iii) of subsection 86.04(a) hereof, the 2023C Subordinated Bonds shall be transferred as provided in Article II of the Subordinate Master Resolution.

(c) In the case of partial redemption or an advance refunding of the 2023C Subordinated Bonds evidencing all or a portion of the principal maturing in a particular year, DTC shall make an appropriate notation on the 2023C Subordinated Bonds indicating the date and amounts of such reduction in principal. The Trustee shall incur no liability for the failure or any error by DTC in making such notation and the records of the Trustee shall be determinative of the outstanding principal amount of 2023C Subordinated Bonds.

(d) The District and the Trustee shall be entitled to treat the person in whose name any 2023C Subordinated Bond is registered as the Bondholder thereof for all purposes of the Subordinate Master Resolution and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the District; and the District and the Trustee shall have no responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with, any Beneficial Owners of the 2023C Subordinated Bonds. Neither the District nor the Trustee will have any responsibility or obligations, legal or otherwise, to the Beneficial Owners or to any other party including DTC or its successor (or substitute depository or its successor), except for the Holder of any 2023C Subordinated Bond.

(e) During any period that the Outstanding 2023C Subordinated Bonds are registered in the name of Cede & Co. or its registered assigns, the District and the Trustee (to the extent funds are provided to it by the District) shall cooperate with Cede & Co., as sole registered Bondholder, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2023C Subordinated Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made immediately available on the date they are due.

Section 86.05. Tax Covenants.

(a) The District shall at all times do and perform all acts and things permitted by law which are necessary or desirable in order to assure that interest paid on the 2023C Subordinated Bonds (or any of them) will be excluded from gross income for federal income tax purposes and shall take no action that would result in such interest not being excluded from gross income for federal income tax purposes. Without limiting the generality of the foregoing, the District agrees to comply with the provisions of the 2023 Tax Certificate. This covenant shall survive payment in full or defeasance of the 2023C Subordinated Bonds.

(b) Without limiting the generality of the foregoing, the District agrees that there shall be paid from time to time all amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Internal Revenue Code of 1986 (the "Code") and any temporary, proposed or final United States Treasury Regulations as may be applicable to the 2023C Subordinated Bonds from time to time (the "Rebate Requirement"). The District specifically covenants to pay or cause to be paid the Rebate Requirement as provided in the 2023 Tax Certificate to the United States of America from any Net Subordinate Revenues lawfully available to the District. This covenant shall survive payment in full or defeasance of the 2023C Subordinated Bonds. Capitalized terms in this Section not otherwise defined in the Subordinate Master Resolution or this Fourteenth Supplemental Resolution shall have the meanings ascribed to them in the 2023 Tax Certificate.

(c) The District shall establish, maintain and hold in trust a fund separate from any other fund established and maintained hereunder designated the Rebate Fund. The District shall cause to be deposited in the Rebate Fund the Rebate Requirement as provided in the 2023 Tax Certificate. Subject to the provisions of this Section, moneys held in the Rebate Fund are hereby pledged to secure payments to the United States government, and the District and the Bondholders shall have no rights in or claim to such moneys.

(d) In accordance with the 2023 Tax Certificate, the District shall remit part or all of the balance held in the Rebate Fund to the United States government as so directed.

(e) Notwithstanding any provision of this Section, if the District shall obtain an opinion of counsel of recognized national standing in the field of obligations the interest on which is excluded from gross income for purposes of federal income taxation to the effect that any specified action required under this Section is no longer required, or to the effect that some different action is required, to maintain the exclusion from gross income of the interest on the 2023C Subordinated Bonds under Section 103 of the Code, the District may rely conclusively on such opinion in complying with the provisions hereof, and the agreements and covenants hereunder shall be deemed to be modified to that extent without the necessity of an amendment of the Subordinate Master Resolution or this Fourteenth Supplemental Resolution or the consent at any time of the Bondholders.

Section 86.06. Rights of Credit Provider.

(a) Unless a Credit Provider Failure has occurred and is continuing, the Credit Provider shall be deemed the sole Holder of the 2023C Subordinated Bonds for the purpose of directing the Trustee with respect to the exercise of remedies and the declaration or waiver of Events of Default pursuant to Article IX of the Subordinate Resolution.

(b) Unless a Credit Provider Failure has occurred and is continuing, the Subordinate Master Resolution and this Fourteenth Supplemental Resolution shall not be amended without the written consent of the Credit Provider.

(c) Unless a Credit Provider Failure has occurred and is continuing, the District shall not appoint a successor Remarketing Agent or Trustee without the written consent of the Credit Provider.

Section 86.07. Limitations on Rights of Trustee.

(a) Proceeds of drawings on the Credit Enhancement and the Liquidity Facility and moneys on deposit in the Purchase Fund shall be used solely for the purposes set forth herein, and the Trustee shall have no lien on such proceeds or money, nor shall such proceeds or moneys be used for, the payment of the fees and/or expenses of the Trustee.

(b) The Trustee shall draw on the Credit Enhancement and the Liquidity Facility at the times and in the manner provided herein and therein and shall have no right to seek or obtain indemnification from the District, the Holders or any other party as a condition of making any such drawing.

Section 86.08. Terms of 2023C Subordinated Bonds Subject to the Subordinate Master Resolution.

(a) Except as in this Fourteenth Supplemental Resolution expressly provided, every term and condition contained in the Subordinate Master Resolution shall apply to this Fourteenth Supplemental Resolution and to the 2023C Subordinated Bonds with the same force and effect as if the same were herein set forth at length, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Fourteenth Supplemental Resolution.

(b) This Fourteenth Supplemental Resolution and all the terms and provisions herein contained shall form part of the Subordinate Master Resolution as fully and with the same effect as if all such terms and provisions had been set forth in the Subordinate Master Resolution. The Subordinate Master Resolution is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended hereby.

Section 86.09. Resolution of Trust to Remain in Effect. Save and except as supplemented by this Fourteenth Supplemental Resolution, the Subordinate Master Resolution shall remain in full force and effect.

Section 86.10. Notice to Rating Agencies. (a) The District shall provide or cause to be provided prompt notice of the following events to the Rating Agencies, if any:

(1) the expiration, termination, extension or substitution of any Credit Enhancement or Liquidity Facility relating to the 2023C Subordinated Bonds;

(2) any optional redemption (as a whole or in part), mandatory purchase or acceleration of the 2023C Subordinated Bonds;

(3) any conversion of the 2023C Subordinated Bonds;

(4) any amendment, modification or supplement of or to the Subordinate Master Resolution or any Credit Enhancement or Liquidity Facility relating to the 2023C Subordinated Bonds (which notice shall be provided or caused to be provided at least ten days prior to the effective date thereof);

(5) any change in the party instructed to draw on any Credit Enhancement or Liquidity Facility relating to the 2023C Subordinated Bonds;

(6) any removal or resignation of the Trustee or the Remarketing Agent; or

(7) any legal defeasance of the 2023C Subordinated Bonds.

(b) The District and the Trustee shall provide or cause to be provided to the Rating Agencies any information reasonably requested by such Rating Agency to maintain its rating, if any, on the 2023C Subordinated Bonds.

Section 86.11. Continuing Disclosure. The District hereby covenants and agrees that it will comply with and carry out all of the provisions of any Continuing Disclosure Agreement executed in connection with the 2023C Subordinated Bonds. Notwithstanding any other provision of the Subordinate Master Resolution or this Fourteenth Supplemental Resolution, failure of the District to comply with any such Continuing Disclosure Agreement shall not be considered an Event of Default; however, the Trustee shall, at the written request of any Participating Underwriter (as defined in any such Continuing Disclosure Agreement) or the Holders of at least 25% aggregate principal amount of Outstanding 2023C Subordinated Bonds upon receipt of indemnity satisfactory to the Trustee or any Holder of 2023C Subordinated Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Section. For purposes of this Section, “Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2023C Subordinated Bonds (including persons holding 2023C Subordinated Bonds through nominees, depositories or other intermediaries).

Section 86.12. Designation of Credit Provider and Liquidity Provider Reimbursement Obligations as Parity Subordinated Debt; Authorization and Issuance of Revolving Notes. For the avoidance of doubt, the District hereby designates as Parity Subordinated Debt, secured by the pledge of Net Subordinated Revenues made by the District pursuant to Section 5.01 of the Subordinate Master Resolution on the same basis as the Subordinated Bonds and all other Parity Subordinated Debt as provided in the Subordinate Master Resolution, any and all obligations of the District pursuant to any Credit Enhancement, Liquidity Facility, or Reimbursement Agreement to reimburse each Credit Provider or Liquidity Provider for drawings or other advances on or pursuant to the related Credit Enhancement or Liquidity Facility, including, without limitation, any accrued interest on such drawings or advances, all as set forth in the related Credit Enhancement, Liquidity Facility, or Reimbursement Agreement (collectively, the “Reimbursement Obligations”). In order to more fully evidence the Reimbursement Obligations as Parity Subordinated Debt, the Board hereby authorizes the issuance from time to time of one or more revenue bonds pursuant to the Act in substantially the form of and with the terms stated in the form of the revolving note set forth as Exhibit B to this Fourteenth Supplemental Resolution (each a “Revolving Note”), but the delivery of such Revolving Note shall not be required to secure any such Reimbursement Obligations as Parity Subordinated Debt. At the time of each delivery of a Credit Enhancement or Liquidity Facility pursuant to the terms of this Fourteenth Supplemental Resolution, the District may deliver a Revolving Note to the related Credit Provider or Liquidity Provider with a stated amount equal to the Available Amount under such Credit Enhancement or Liquidity Facility and with all blanks and brackets filled in as appropriate and with such other changes as may be necessary or appropriate to conform to the terms of such Credit Enhancement, Liquidity Facility, or Reimbursement Agreement.

Approved: May 18, 2023

INTRODUCED: DIRECTOR ROSE				
SECONDED: DIRECTOR BUI-THOMPSON				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

EXHIBIT A

FORM OF 2023C SUBORDINATED BOND

[TO BE CONFORMED TO SALES CERTIFICATE]

No. R-__ \$ _____

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE REFUNDING BOND
2023 SERIES C**

<u>Maturity</u>	<u>Interest Per Annum</u>	<u>Date</u>	<u>CUSIP</u>
August 15, 20__	Variable	_____, 2023	

REGISTERED OWNER: _____

PRINCIPAL AMOUNT: _____ DOLLARS

SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district duly organized and existing under and pursuant to the laws of the State of California (the “District”), for value received, hereby promises to pay (but only out of the Net Subordinated Revenues hereinafter referred to) to the registered owner named above or registered assigns, on the maturity date specified above, the principal sum specified above together with interest thereon from _____, 2023, until the principal hereof shall have been paid, at the interest rates per annum determined as set forth below, payable on each Interest Payment Date, as defined below. The principal of and premium, if any, and interest on the 2023C Subordinated Bonds, as defined below, shall be payable in lawful money of the United States of America. Interest on the 2023C Subordinated Bonds shall be paid on each Interest Payment Date, as defined below, by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode, by check mailed on the date on which due to the Holders of the 2023C Subordinated Bonds at the close of business on the Record Date for the 2023C Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2023C Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2023C Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2023C Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of \$1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2023C Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2023C Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2023C Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2023C Subordinated Bonds registered in the name of the Securities Depository

(or its nominee), interest on any such 2023C Subordinated Bond shall be payable only upon surrender of such 2023C Subordinated Bond at the office of the Paying Agent. The principal of and premium, if any, on each 2023C Subordinated Bond shall be payable on the Principal Payment Date of such 2023C Subordinated Bond upon surrender thereof at the office of the Paying Agent, subject to the terms of the Fourteenth Supplemental Resolution, as defined below.

This Bond is one of a duly authorized issue of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds (hereinafter called the “Subordinated Bonds”) designated as Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “2023C Subordinated Bonds”). The Subordinated Bonds are not limited in aggregate principal amount, except as otherwise provided in the Subordinate Resolution hereinafter mentioned, and consist or may consist of one or more series of varying denominations, dates, maturities, interest rates and other provisions, as in said Subordinate Resolution provided, all issued and to be issued pursuant to the provisions of the Revenue Bond Law of 1941 as made applicable by Article 6a of Chapter 6, Division 6, of the California Public Utilities Code and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (hereinafter called the “Act”). This 2023C Subordinated Bond is issued pursuant to Resolution No. 85-11-1 of the District, adopted November 7, 1985, providing for the issuance of the Subordinated Bonds, as amended and restated by Resolution No. 01-06-10 of the District, adopted on June 21, 2001 (as amended and restated, the “Subordinate Master Resolution”), and as supplemented and amended by resolutions to date, including by a Fourteenth Supplemental Resolution, adopted May 18, 2023, authorizing the issuance of the 2023C Subordinated Bonds (said resolution as amended, restated and supplemented and the Fourteenth Supplemental Resolution being hereinafter collectively called the “Subordinate Resolution”). Reference is hereby made to the Subordinate Resolution and the Act for a description of the terms on which the Subordinated Bonds are issued and to be issued, the provisions with regard to the nature and extent of the Revenues, as that term is defined in the Subordinate Resolution, and the rights of the registered owners of the Subordinated Bonds; and all the terms of the Subordinate Resolution and the Act are hereby incorporated herein and constitute a contract between the District and the registered owner from time to time of this 2023C Subordinated Bond, and to all the provisions thereof the registered owner of this 2023C Subordinated Bond, by its acceptance hereof, consents and agrees. Additional bonds may be issued on a parity with the Subordinated Bonds of this authorized issue, but only subject to the conditions and limitations contained in the Subordinate Resolution. Capitalized terms used, but not defined herein shall have the meaning given such terms in the Subordinate Resolution.

The Subordinated Bonds and the interest thereon, together with the Parity Subordinated Debt (as defined in the Subordinate Resolution) heretofore or hereafter issued by the District, and the interest thereon, are payable from, and are secured by a charge and lien on, the Net Subordinated Revenues derived by the District from the Electric System (as those terms are defined in the Subordinate Resolution). The District covenants and warrants that for the payment of the Subordinated Bonds, and interest thereon, there have been created and will be maintained by the District special funds into which there shall be deposited from Net Subordinated Revenues available for that purpose sums sufficient to pay the principal of, and interest on, all of the Subordinated Bonds, as such principal and interest become due, and as an irrevocable charge the District has allocated Net Subordinated Revenues to such payment, all in accordance with the Subordinate Resolution.

The Subordinated Bonds, including the 2023C Subordinated Bonds, are expressly subordinated in right of payment to the prior payment in full of all Parity Bonds, as that term is defined in Resolution No. 6649 of the District, adopted on January 7, 1971 (the “Senior Bond Resolution”), including the District’s Electric Revenue Bonds. The holder of this 2023C Subordinated Bond, by acceptance hereof, authorizes and directs the Trustee on its behalf to take such action as may be necessary or appropriate to effectuate the subordination provided in this paragraph and in the Subordinate Resolution and appoints the Trustee its attorney-in-fact for any and all such purposes.

The Subordinated Bonds are special obligations of the District, and are payable, both as to principal and interest, out of the Net Subordinated Revenues pertaining to the Electric System, and not out of any other fund or moneys of the District. No holder of this Bond shall ever have the right to compel any exercise of the taxing power of the District to pay this Bond or the interest hereon.

The term of the 2023C Subordinated Bonds will be divided into consecutive Interest Periods during each of which the 2023C Subordinated Bonds shall bear interest at a Flexible Rate or Flexible Rates, a Daily Rate, a Weekly Rate, a Direct Purchase Index Rate, a Term Rate, an Index Rate or a Fixed Rate or Fixed Rates. The 2023C Subordinated Bonds shall initially bear interest in the [Daily Mode]. The Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2023C Subordinated Bonds thereafter may be changed from time to time as provided in the Subordinate Resolution. As hereinafter described, the 2023C Subordinated Bonds are subject to mandatory purchase on any Conversion Date.

Interest on the 2023C Subordinated Bonds is to be paid on: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2023C Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2023C Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day specified in writing by the District in connection with the Conversion Date to such Term Rate Mode or Fixed Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the applicable Reimbursement Agreement or Liquidity Facility (each an “Interest Payment Date”).

The interest rate on the 2023C Subordinated Bonds shall be determined as follows:

Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and in Section 82.04 of the Fourteenth Supplemental Resolution, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2023C Subordinated Bond

the Interest Period which would result in the Remarketing Agent being able to remarket such 2023C Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2023C Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2023C Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2023C Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2023C Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023C Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period.

During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. The Term Rate shall be the minimum rate which, in the sole judgment of the Remarketing Agent, would result in a sale of such 2023C Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the

Interest Period selected by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

Fixed Rates. The Remarketing Agent shall determine the Fixed Rate for 2023C Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2023C Subordinated Bonds will have Serial Maturity Dates in accordance with Section 82.11(b)(v) of the Fourteenth Supplemental Resolution). Except as set forth in Section 82.11(b)(v) of the Fourteenth Supplemental Resolution, the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2023C Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 82.11(b)(v) of the Fourteenth Supplemental Resolution, the Fixed Rate so established shall remain in effect until the Maturity Date of such 2023C Subordinated Bonds.

Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2023C Subordinated Bonds (other than 2023C Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2023C Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2023C Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2023C Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2023C Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2023C Subordinated Bonds.

For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest

Period, the interest rate for such 2023C Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

For 2023C Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2023C Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

Direct Purchase Index Rates.

(a) During each Direct Purchase Index Rate Period, the 2023C Subordinated Bonds shall, subject to subparagraph (b) below, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2023C Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2023C Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2023C Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2023C Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 84.02(b) thereof, but subject to Section 82.04(c) and Section 82.09(b)(ii) and (iii) thereof, from and after any Taxable Date, the interest rate on 2023C Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 84.02(b) thereof, but subject to Section 82.04(c) and Section 82.09(b)(iii) thereof, from and after the effective date of any

“Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2023C Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2023C Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2023C Subordinated Bonds exceeds the Maximum Rate for such 2023C Subordinated Bonds, then (A) such 2023C Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2023C Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2023C Subordinated Bonds as otherwise calculated pursuant to the above provisions and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2023C Subordinated Bonds as otherwise calculated pursuant to the above provisions is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2023C Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2023C Subordinated Bonds are redeemed or tendered for purchase in accordance with the Fourteenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2023C Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything in the Subordinate Resolution to the contrary, but subject to Section 82.04(c) and Section 82.09(b)(i), (ii) and (iii) thereof, during any Amortization Period, the 2023C Subordinated Bonds shall bear interest at the Bank Rate.

Index Rates. During each Index Rate Period, the 2023C Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2023C Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2023C Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2023C Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2023C Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2023C Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2023C Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2023C Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the District shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2023C Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such

Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2023C Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Optional Tenders of 2023C Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 84.06, the Beneficial Owners of 2023C Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2023C Subordinated Bonds (or portions of those 2023C Subordinated Bonds, provided that no 2023C Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode. The 2023C Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2023C Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2023C Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2023C Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2023C Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

The term “Mandatory Purchase Date” means: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such Flexible Rate Bond, (ii) with respect to 2023C Subordinated Bonds in the Term Rate Mode, the first Business Day following the last day of each Term Rate Period applicable to such 2023C

Subordinated Bonds, (iii) with respect to any 2023C Subordinated Bonds, any Conversion Date applicable to such 2023C Subordinated Bond (except for any Conversion Date in respect of a conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode) or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 82.11 not failed to occur (except for any such date in respect of a proposed conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode), (iv) with respect to any 2023C Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2023C Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility supporting such 2023C Subordinated Bonds, (vi) with respect to any 2023C Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility, which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023C Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee's receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023C Subordinated Bonds and in no event later than the Business Day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2023C Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2023C Subordinated Bonds (other than interest on 2023C Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2023C Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee's receipt of such notice, (viii) with respect to 2023C Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee's receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023C Subordinated Bonds, (ix) with respect to 2023C Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2023C Subordinated Bonds, and (x) with respect to 2023C Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Notwithstanding the above paragraphs and anything to the contrary in the Fourteenth Supplemental Resolution, in the event the 2023C Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2023C Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2023C Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant

Agreement or the Subordinate Master Resolution has occurred and is continuing), in which case the 2023C Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2023C Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2023C Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2023C Subordinated Bonds may be subject to redemption or purchase at the sole option of the District at any time without notice as and to the extent provided in the Continuing Covenant Agreement.

Optional Redemption of Flexible Rate Bonds. 2023C Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2023C Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Optional Redemption of 2023C Subordinated Bonds in the Daily Mode or the Weekly Mode. 2023C Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Optional Redemption of 2023C Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

2023C Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2023C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2023C Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2023C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

2023C Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2023C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2023C Subordinated Bonds so changed to a Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2023C Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Optional and Mandatory Redemption of 2023C Subordinated Bonds in the Direct Purchase Index Mode.

Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2023C Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

2023C Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Mandatory Sinking Fund Account Redemption of 2023C Subordinated Bonds. The 2023C Subordinated Bonds [maturing on August 15, 20[___],] shall be subject to redemption prior to maturity from mandatory sinking fund account payments for such 2023C Subordinated Bonds on August 15 of each year on and after August 15, 20__, at a Redemption Price equal to the principal amount of such 2023C Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The following shall be the mandatory sinking fund account payments for the 2023C Subordinated Bonds [maturing on August 15, 20[___]]. Such mandatory sinking fund account payments shall be due on August 15 of the years set forth in the following table in the respective amounts set forth opposite such years in said table:

Year	Amount	Year	Amount
------	--------	------	--------

* Payment at Maturity

Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2023C Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2023C Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023C Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2023C Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2023C Subordinated Bonds to be redeemed, and shall also state that the interest on the 2023C Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023C Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2023C Subordinated Bonds to be redeemed. Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption. Notwithstanding the foregoing, notice of redemption shall not be required for 2023C Subordinated Bonds redeemed on a Mandatory Purchase Date.

This 2023C Subordinated Bond is transferable by the registered owner hereof, in person or by the attorney of such owner duly authorized in writing, at the principal office of the Trustee but only in the manner, subject to the limitations and upon payment of the charges provided in the Subordinate Resolution, and upon surrender and cancellation of this 2023C Subordinated Bond. Upon such transfer a new fully registered Bond or Subordinated Bonds without coupons, of authorized denomination or denominations, for the same aggregate principal amount and maturity will be issued to the transferee in exchange herefor.

The District and the Trustee may deem and treat the registered owner hereof as the absolute owner hereof for all purposes, and the District and the Trustee shall not be affected by any notice to the contrary.

To the extent this 2023C Subordinated Bond constitutes a Liquidity Facility Bond, the terms and conditions of the Fourteenth Supplemental Resolution with respect to Liquidity Facility Bonds shall control this 2023C Subordinated Bond.

The rights and obligations of the District and of the holders and registered owners of the Subordinated Bonds may be modified or amended at any time in the manner, to the extent, and upon the terms provided in the Subordinate Resolution, provided that no such modification or amendment shall (i) extend the fixed maturity of any Subordinated Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce the amount of any premium payable upon the redemption thereof, without the consent of the holder of each Subordinated Bond so affected, or (ii) reduce the percentage of Subordinated Bonds required for the affirmative vote or written consent to an amendment or modification, without the consent of the holders of all the Subordinated Bonds then outstanding, or (iii) without its written consent thereto, modify any of the rights or obligations of the Trustee.

It is hereby certified and recited that any and all acts, conditions and things required to exist, to happen and to be performed, precedent to and in the incurring of the indebtedness evidenced by this 2023C Subordinated Bond, and in the issuing of this 2023C Subordinated Bond, do exist, have happened and have been performed in due time, form and manner, as required by the Constitution and statutes of the State of California, and that this 2023C Subordinated Bond, together with all other indebtedness of the District pertaining to the Electric System, is within every debt and other limit prescribed by the Constitution and the statutes of the State of California, and is not in excess of the amount of Subordinated Bonds permitted to be issued under the Subordinate Resolution.

This 2023C Subordinated Bond shall not be entitled to any benefit under the Subordinate Resolution, or become valid or obligatory for any purpose, until the certificate of authentication hereon endorsed shall have been signed by the Trustee. To the extent of any conflict or inconsistency between any provisions contained in this 2023C Subordinated Bond and the Subordinate Resolution, the provisions of the Subordinate Resolution shall control.

IN WITNESS WHEREOF, SACRAMENTO MUNICIPAL UTILITY DISTRICT has caused this 2023C Subordinated Bond to be executed in its name and on its behalf by the facsimile signature of its President of its Board of Directors and by the facsimile signature of its Treasurer and countersigned by the facsimile signature of its Secretary, and the seal of the District to be reproduced hereon, by facsimile and this 2023C Subordinated Bond to be dated as of the date first written above.

SACRAMENTO MUNICIPAL UTILITY
DISTRICT

By _____
President of the Board of Directors

By _____
Treasurer of the District

(SEAL)

Countersigned:

Secretary of the District

CERTIFICATE OF AUTHENTICATION AND REGISTRATION

This is one of the Subordinated Bonds described in the within-mentioned Subordinate Resolution and registered on the date set forth below.

Dated: _____, 2023

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
as Trustee

By _____
Authorized Officer

ASSIGNMENT

For value received _____ hereby sell, assign and transfer unto _____ whose taxpayer identification number is _____ the within-mentioned Bond and hereby irrevocably constitute and appoint _____ attorney, to transfer the same on the books of the District at the office of the Trustee, with full power of substitution in the premises.

NOTE: The signature to this Assignment must correspond with the name on the face of the within Registered Bond in every particular, without alteration or enlargement or any change whatsoever.

Dated:

Signature Guaranteed by:

NOTE: Signature must be guaranteed by an eligible guarantor institution

EXHIBIT B

FORM OF REVOLVING NOTE

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE REFUNDING BONDS
2023 SERIES C**

[Delivery Date] \$ _____

The Sacramento Municipal Utility District (the “District”), for value received, hereby promises to pay to the order of [Bank] (the “Bank”), pursuant to that certain _____ dated as of _____ (the “Agreement”), between the District and the Bank, at the office of the Bank at _____, the aggregate unpaid principal amount of all Reimbursement Obligations (as defined in the Agreement) pursuant to the Agreement on the dates and in the amounts provided for in the Agreement.

The District promises to pay interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. All payments of principal and interest shall be made in any coin or currency of the United States of America which at the time of payment is legal tender for public and private debts in immediately available funds. All capitalized terms used herein and not otherwise defined herein shall have the meanings specified in the Agreement.

This Revolving Note is a Revolving Note as referred to in Section 86.12 of Resolution No. 01-06-10 of the District adopted June 21, 2001, amending and restating Resolution No. 85-11-1 of the District adopted November 7, 1985, as amended and supplemented, including as supplemented by Resolution No. _____ of the District adopted May 18, 2023 (the “Fourteenth Supplemental Resolution”) (collectively, the “Subordinate Master Resolution”). This Revolving Note evidences the Reimbursement Obligations owed to the Bank by the District pursuant to the Agreement which have been designated by the District as, and constitute, Parity Subordinated Debt under and as defined in the Subordinate Master Resolution and, as such Parity Subordinated Debt, is entitled to the benefits afforded Parity Subordinated Debt and the holders thereof pursuant to the Subordinate Master Resolution and is secured by a lien on the Net Subordinated Revenues as more fully set forth in and subject to the terms of the Subordinate Master Resolution. As provided in the Agreement, the Reimbursement Obligations and this Revolving Note are subject to prepayment, in whole or in part, in accordance with the terms of the Agreement.

The Bank agrees, by acceptance of this Revolving Note, that it will make a notation on the schedule attached hereto of all Reimbursement Obligations evidenced hereby and all principal payments and prepayments made hereunder and of the date to which interest hereon has been paid, all as provided in the Agreement; *provided, however*, that the failure to make any such notation or any error in such notation shall not limit or otherwise affect the obligation of the District hereunder with respect to payments of principal of and interest on this Revolving Note.

This Revolving Note is authorized by the District to be issued to provide for the payment of the principal of and interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. This Revolving Note is issued under and pursuant to and in full compliance with the Subordinate Master Resolution and the Fourteenth Supplemental Resolution.

It is hereby certified that all conditions, acts and things essential to the validity of this Revolving Note exist, have happened and have been done and that every requirement of law affecting the issuance hereof has been duly complied with.

IN WITNESS WHEREOF, SMUD, has caused this Revolving Note to be executed by an authorized officer of SMUD and this Revolving Note to be dated as of date set forth above.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
Name: _____
Title: _____

SCHEDULE FOR REVOLVING NOTE
DATED _____
BY SACRAMENTO MUNICIPAL UTILITY DISTRICT
PAYABLE TO [BANK]

<u>Date</u>	<u>Amount of Drawing or Advance Made</u>	<u>Amount of Principal Paid</u>	<u>Date to Which Interest Paid</u>	<u>Due Date</u>	<u>Notation Made by</u>
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SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. 23-05-08

FIFTEENTH SUPPLEMENTAL RESOLUTION

AUTHORIZING THE ISSUANCE OF

SUBORDINATED ELECTRIC REVENUE BONDS,
2023 SERIES D

Adopted: May 18, 2023

(Supplemental to Resolution No. 85-11-1 adopted November 7, 1985
as amended and restated by Resolution No. 01-06-10 adopted June 21, 2001)

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RESOLUTION NO. 23-05-08

Fifteenth Supplemental Resolution
(Supplemental to Resolution No. 85-11-1 Adopted November 7, 1985,
as amended and restated by Resolution No. 01-06-10 Adopted June 21, 2001)

Subordinated Electric Revenue Bonds,
2023 Series D

WHEREAS, the Board of Directors (the “Board”) of the Sacramento Municipal Utility District (the “District”), on November 7, 1985, adopted its Resolution No. 85-11-1 which was amended and restated by Resolution No. 01-06-10, adopted on June 21, 2001, providing for the issuance of the District’s Subordinated Electric Revenue Bonds (as supplemented and amended, herein called the “Subordinate Master Resolution”);

WHEREAS, the Subordinate Master Resolution provides that the District may issue bonds from time to time as the issuance thereof is authorized by the Board by a supplemental resolution;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Subordinate Master Resolution and the Act (as defined in the Subordinate Master Resolution); and

WHEREAS, the District has determined to issue its Subordinated Electric Revenue Bonds, 2023 Series D (the “2023D Subordinated Bonds”), in the aggregate principal amount determined as set forth in Section 88.02 to (i) finance and refinance improvements and additions to the District’s Electric System, including through the payment of all or a portion of the District’s outstanding commercial paper notes (to the extent set forth in the Sales Certificate), (ii) refund certain series of the District’s Electric Revenue Bonds (to the extent set forth, and to be identified, in the Sales Certificate) (the “Refunded Bonds”), and (iii) pay costs of issuance (to the extent set forth in the Sales Certificate);

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Sacramento Municipal Utility District, as follows:

ARTICLE LXXXVII

AUTHORITY AND DEFINITIONS

Section 87.01. Supplemental Resolution. This Fifteenth Supplemental Resolution is supplemental to the Subordinate Master Resolution.

Section 87.02. Definitions; Prevailing Time.

(1) Except as provided by this Fifteenth Supplemental Resolution, all terms which are defined in Section 1.03 of the Subordinate Master Resolution shall have the same meanings in this Fifteenth Supplemental Resolution as such terms are given in said Section 1.03. Unless otherwise provided herein, all references to a particular time are to New York City time.

In the event of a conflict between the meanings given in said Section 1.03 and the meanings given in this Section, the meanings given in this Section shall prevail.

(2) In this Fifteenth Supplemental Resolution:

Alternate Credit Enhancement shall mean a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof as a replacement or substitute for any Credit Enhancement then in effect and providing for or supporting the payment of the principal of and interest on the 2023D Subordinated Bonds.

Alternate Liquidity Facility shall mean a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof as a replacement or substitute for any Liquidity Facility then in effect and providing for the payment of the Purchase Price of Tendered Bonds.

Alternate Rate shall mean, on any Rate Determination Date, for any Interest Rate Mode other than a Direct Purchase Index Mode, an Index Mode or a Term Rate Mode, a rate per annum equal to 110% of (a) the SIFMA Municipal Swap Index of Municipal Market Data most recently available as of the date of determination, or (b) if such index is no longer available, or if the SIFMA Municipal Swap Index is no longer published, the S&P Municipal Bond 7 Day High Grade Rate Index, or if neither the SIFMA Municipal Swap Index nor the S&P Municipal Bond 7 Day High Grade Rate Index is published, the index determined to equal the prevailing rate determined by the Remarketing Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Remarketing Agent to be comparable under the circumstances to the criteria used by the Securities Industry and Financial Markets Association to determine the SIFMA Municipal Swap Index just prior to when the Securities and Financial Markets Association stopped publishing the SIFMA Municipal Swap Index. The Trustee shall make the determinations required by this definition, upon notification from the District, if there is no Remarketing Agent, if the Remarketing Agent fails to make any such determination or if the Remarketing Agent has suspended its remarketing efforts in accordance with the Remarketing Agreement.

Amortization End Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Amortization Interest Payment Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Amortization Period shall mean, in the event the 2023D Subordinated Bonds are not purchased or remarketed on any Bank Purchase Date and the other conditions set forth in Section 90.02(b) are satisfied, the period commencing on the Bank Purchase Date and ending on the Amortization End Date.

Amortization Principal Payment Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Applicable Factor shall mean, upon any Conversion to a Direct Purchase Index Rate Period, the percentage of the Direct Purchase Index designated in writing by the District as the Applicable Factor for such Direct Purchase Index Rate Period pursuant to Section 88.09(a); provided, however, that the Applicable Factor shall never be less than 65% unless a Favorable Opinion of Bond Counsel is delivered in connection with the Conversion to such Direct Purchase Index Rate Period.

Applicable Spread shall mean, with respect to any Direct Purchase Index Rate Period, the number of basis points determined by the Market Agent on or before the first day of such Direct Purchase Index Rate Period and designated by the District in accordance with Section 88.09(a) (which may include a schedule for the Applicable Spread based upon the ratings assigned to any indebtedness of the District) that, when added to the product of the Direct Purchase Index multiplied by the Applicable Factor, would equal the minimum interest rate per annum that would enable the 2023D Subordinated Bonds to be sold on such date at a price equal to the principal amount thereof (without regard to accrued interest, if any, thereon).

Authorized Denominations shall mean (i) with respect to 2023D Subordinated Bonds in a Daily Mode or Weekly Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof; (ii) with respect to 2023D Subordinated Bonds in a Flexible Mode, \$100,000 and any integral multiple of \$1,000 in excess thereof; (iii) with respect to 2023D Subordinated Bonds in a Direct Purchase Index Mode or Index Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof; and (iv) with respect to 2023D Subordinated Bonds in a Term Rate Mode or a Fixed Rate Mode, \$5,000 and any integral multiple thereof.

Available Amount shall mean the amount available under a Credit Enhancement or Liquidity Facility, as applicable, to pay the principal of and interest on the 2023D Subordinated Bonds or the Purchase Price of the 2023D Subordinated Bonds, as applicable.

Available Moneys shall mean (a) if a Credit Enhancement is in effect, (i) moneys drawn under the Credit Enhancement which at all times since their receipt by the Trustee were held in a separate segregated account or accounts or subaccount or subaccounts in which no moneys (other than those drawn under the Credit Enhancement) were at any time held, (ii) moneys which have been paid to the Trustee and have been on deposit with the Trustee for at least 124 days (or, if paid to the Trustee by an “affiliate,” as defined in Bankruptcy Code §101(2), of the District, 366 days) during and prior to which no Event of Bankruptcy shall have occurred, (iii) any other moneys, if, in the opinion of nationally recognized counsel experienced in bankruptcy matters (which opinion shall be acceptable to each Rating Agency then rating the 2023D Subordinated Bonds), the application of such moneys will not constitute a voidable preference in the event of the occurrence of an Event of Bankruptcy, and (iv) investment earnings on any of the moneys described in clauses (i), (ii) and (iii) of this definition; and (b) if a Credit Enhancement is not in effect, “Available Moneys” means any moneys deposited with the Trustee.

Bank shall mean, while the 2023D Subordinated Bonds are in a Direct Purchase Index Mode, the Holder of the 2023D Subordinated Bonds, provided that there is a single Holder of all of the 2023D Subordinated Bonds and provided further that the 2023D Subordinated Bonds are not then held under the book-entry system of a Securities Depository. If there is more

than one Holder of the 2023D Subordinated Bonds while the 2023D Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Holders owning a majority of the aggregate principal amount of the 2023D Subordinated Bonds then Outstanding. If the 2023D Subordinated Bonds are held under the book-entry system of a Securities Depository during any Direct Purchase Index Mode, “Bank” means the Beneficial Owner of the 2023D Subordinated Bonds, provided that there is a single Beneficial Owner of all of the 2023D Subordinated Bonds. If there is more than one Beneficial Owner of the 2023D Subordinated Bonds while the 2023D Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Beneficial Owners who are the beneficial owners of a majority of the aggregate principal amount of the 2023D Subordinated Bonds then Outstanding.

Bank Purchase Date shall mean, during any Direct Purchase Index Rate Period, (i) the date designated by the District pursuant to Section 88.11(a) and (ii) the date which is five Business Days after the date on which the Trustee receives written notice from the Bank under a Continuing Covenant Agreement which (x) advises the Trustee of the occurrence and continuance of an “Event of Default” under and as defined in such Continuing Covenant Agreement and (y) directs the Trustee to cause a mandatory tender for purchase of the 2023D Subordinated Bonds by reason of such “Event of Default.”

Bank Rate shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Bankruptcy Code means Title 11 of the United States Code, as amended, and any successor statute.

Beneficial Owner shall mean, so long as the 2023D Subordinated Bonds are held in the Book-Entry System, any Person who acquires a beneficial ownership interest in a 2023D Subordinated Bond held by the Securities Depository. If at any time the 2023D Subordinated Bonds are not held in the Book-Entry System, Beneficial Owner shall mean Holder for purposes of the Subordinate Master Resolution.

Bond Counsel shall mean any firm of nationally recognized municipal bond attorneys selected by the District and experienced in the issuance of municipal bonds and matters relating to the exclusion of the interest thereon from gross income for federal income tax purposes.

Book-Entry System shall mean the system maintained by the Securities Depository.

Business Day shall mean any day other than (i) a Saturday or Sunday or (ii) a day on which banks located in (a) the State of California or the State of New York, (b) the city or cities in which the principal office of the Trustee, the Paying Agent, the Remarketing Agent, if any, the Bank, if any, or the Calculation Agent, if any, are located, or (c) the city or cities in which the office of the Credit Provider or Liquidity Provider at which it will pay draws or advances is located, are required or authorized to remain closed, (iii) a day on which The New York Stock Exchange or Federal Reserve Bank is closed or (iv) a day on which the principal offices of the Credit Provider or Liquidity Provider are closed.

Calculation Agent shall mean, (i) during any Direct Purchase Index Rate Period, the Bank or any other party appointed by the District with the consent of the Bank so long as the Bank owns a majority in aggregate principal amount of the 2023D Subordinated Bonds and (ii) during any Index Rate Period, the Trustee or any other party appointed by the District to act as calculation agent for the 2023D Subordinated Bonds.

Call Protection Date shall mean (i) with respect to the initial issuance of the 2023D Subordinated Bonds, if applicable, the date specified in the Sales Certificate as the Call Protection Date and (ii) with respect to any conversion to a Term Rate Period or Index Rate Period, the date specified by the District in writing as the Call Protection Date for such Term Rate Period or Index Rate Period on or before the first day of such Term Rate Period or Index Rate Period.

Code shall mean the Internal Revenue Code of 1986, as amended.

Continuing Covenant Agreement shall mean, during any Direct Purchase Index Rate Period, any agreement between the District and the Bank which may be designated as the Continuing Covenant Agreement.

Conversion Date shall mean, with respect to the 2023D Subordinated Bonds in a particular Interest Rate Mode, the day on which another Interest Rate Mode for the 2023D Subordinated Bonds begins, with respect to the 2023D Subordinated Bonds in a Term Rate Mode, the day on which a new Term Rate Period begins, with respect to 2023D Subordinated Bonds in a Direct Purchase Index Mode, the day on which a new Direct Purchase Index Rate Period begins, and with respect to 2023D Subordinated Bonds in an Index Mode, the day on which a new Index Rate Period begins.

Conversion Notice shall mean the notice from the District to the other Notice Parties pursuant to Section 88.11(a)(i).

Credit Enhancement shall mean, with respect to the 2023D Subordinated Bonds, a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof and then in effect and providing for or supporting the payment of the principal of and interest on the 2023D Subordinated Bonds and, upon replacement of any such Credit Enhancement with an Alternate Credit Enhancement, the Alternate Credit Enhancement then in effect.

Credit Provider shall mean, with respect to the 2023D Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Credit Enhancement, if any, then in effect for the 2023D Subordinated Bonds.

Credit Provider Failure or Liquidity Provider Failure shall mean a failure of a Credit Provider or Liquidity Provider, as applicable, to pay a properly presented and strictly conforming draw or request for advance under a Credit Enhancement or Liquidity Facility, as applicable, or the filing or commencement of any bankruptcy or insolvency proceedings by or against a Credit Provider or Liquidity Provider, as applicable, or a Credit Provider or Liquidity Provider, as applicable, shall declare a moratorium on the payment of its unsecured debt obligations or shall repudiate a Credit Enhancement or Liquidity Facility, as applicable.

Current Mode shall have the meaning specified in Section 88.11(a).

Daily Mode shall mean the Interest Rate Mode during which the 2023D Subordinated Bonds bear interest at the Daily Rate.

Daily Rate shall mean the per annum interest rate on any 2023D Subordinated Bond in the Daily Mode determined pursuant to Section 88.06(a).

Daily Rate Period shall mean the period during which a 2023D Subordinated Bond in the Daily Mode shall bear a Daily Rate, which shall be from the Business Day upon which a Daily Rate is set to but not including the next succeeding Business Day.

Default Rate shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Delayed Remarketing Period shall have the meaning specified in Section 90.10(b) hereof.

Determination of Taxability shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Direct Purchase Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Market Agent.

Direct Purchase Index Mode shall mean the Interest Rate Mode during which the 2023D Subordinated Bonds bear interest at a Direct Purchase Index Rate.

Direct Purchase Index Rate shall mean the per annum interest rate on any 2023D Subordinated Bond in the Direct Purchase Index Mode determined in accordance with Section 88.09, being the Direct Purchase Index Rate, the Taxable Rate, the Default Rate or the Bank Rate, as applicable.

Direct Purchase Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

Direct Purchase Index Rate Effective Period shall mean, during any Direct Purchase Index Rate Period, the period from and including the first day of such Direct Purchase Index Rate Period to but excluding the next succeeding Direct Purchase Index Rate Reset Date and, thereafter, means each Direct Purchase Index Rate Reset Date to but excluding the next succeeding Direct Purchase Index Rate Reset Date.

Direct Purchase Index Rate Period shall mean the period from (and including) the date on which the 2023D Subordinated Bonds begin to bear interest in the Direct Purchase Index Mode to (but excluding) the earliest to occur of (i) the immediately succeeding Bank Purchase Date, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of

the 2023D Subordinated Bonds have been redeemed or defeased in full and (iv) the Maturity Date.

Direct Purchase Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

District Purchase Account shall mean the account by that name in the Purchase Fund created in Section 90.09.

Electronic Means shall mean telecopy, facsimile transmission, e-mail transmission or other similar electronic means of communication providing evidence of transmission, including a telephonic communication confirmed by any other method set forth in this definition.

Eligible Account shall mean an account that is either (a) maintained with a federal or state-chartered depository institution or trust company that has a Standard & Poor's short-term debt rating of at least 'A-2' (or, if no short-term debt rating, a long-term debt rating of 'BBB+'); or (b) maintained with the corporate trust department of a federal depository institution or state-chartered depository institution subject to regulations regarding fiduciary funds on deposit similar to Title 12 of the U.S. Code of Federal Regulation Section 9.10(b), which, in either case, has corporate trust powers and is acting in its fiduciary capacity. In the event that a fund or account required to be an "Eligible Account" no longer complies with the requirements listed above, the Trustee shall promptly (and, in any case, within not more than 30 calendar days) move such fund or account to another financial institution such that the Eligible Account requirements stated above will again be satisfied.

Event of Bankruptcy shall mean any of the following events:

(i) the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2023D Subordinated Bonds, or an "affiliate" of the District as defined in Bankruptcy Code § 101(2)) shall (a) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator or the like of the District (or such other Person) or of all or any substantial part of their respective property, (b) commence a voluntary case under the Bankruptcy Code, or (c) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts; or

(ii) a proceeding or case shall be commenced, without the application or consent of the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2023D Subordinated Bonds, or an "affiliate" of the District as defined in Bankruptcy Code § 101(2)) in any court of competent jurisdiction, seeking (a) the liquidation, reorganization, dissolution, winding-up, or composition or adjustment of debts, of the District (or any such other Person), (b) the appointment of a trustee, receiver, custodian, liquidator or the like of the District (or any such other Person) or of all or any substantial part of their respective property, or (c) similar relief in respect of the District (or any such other Person) under any law

relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts.

Event of Taxability shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Expiration Date shall mean the stated expiration date of a Credit Enhancement or a Liquidity Facility, as it may be extended from time to time as provided in the Credit Enhancement or the Liquidity Facility, or any earlier date on which a Credit Enhancement or a Liquidity Facility shall terminate at the direction of the District.

Favorable Opinion of Bond Counsel shall mean, with respect to any action the occurrence of which requires such an opinion, an Opinion of Counsel, which shall be a Bond Counsel, to the effect that such action is permitted under the Subordinate Master Resolution and will not, in and of itself, cause interest on the 2023D Subordinated Bonds to be included in gross income for purposes of federal income taxation.

Fitch shall mean Fitch, Inc., and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “Fitch” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

Fixed Rate shall mean the per annum interest rate on any 2023D Subordinated Bond in the Fixed Rate Mode determined pursuant to Section 88.07(b).

Fixed Rate Bond shall mean a 2023D Subordinated Bond in the Fixed Rate Mode.

Fixed Rate Mode shall mean the Interest Rate Mode during which the 2023D Subordinated Bonds bear interest at the Fixed Rate.

Fixed Rate Period shall mean the period from the Conversion Date upon which the 2023D Subordinated Bonds were converted to the Fixed Rate Mode to but not including the Maturity Date for the 2023D Subordinated Bonds.

Flexible Mode shall mean the Interest Rate Mode during which the 2023D Subordinated Bonds bear interest at Flexible Rates.

Flexible Rate shall mean the per annum interest rate on a Flexible Rate Bond determined for such Flexible Rate Bond pursuant to Section 88.05. The Flexible Rate Bonds may bear interest at different Flexible Rates.

Flexible Rate Bond shall mean a 2023D Subordinated Bond in the Flexible Mode.

Flexible Rate Period shall mean the period of from one to 270 calendar days (which period must end on either a day which immediately precedes a Business Day or the day

immediately preceding the Maturity Date) during which a Flexible Rate Bond shall bear interest at a Flexible Rate, as established by the Remarketing Agent pursuant to Section 88.05. The Flexible Rate Bonds may be in different Flexible Rate Periods.

Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Remarketing Agent.

Index Mode shall mean the Interest Rate Mode during which the 2023D Subordinated Bonds bear interest at an Index Rate.

Index Rate shall mean the per annum interest rate on any 2023D Subordinated Bond in the Index Mode determined in accordance with Section 88.10.

Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Rate Effective Period shall mean, during any Index Rate Period, the period from and including the first day of such Index Rate Period through and including the day immediately preceding the next succeeding Index Rate Reset Date and, thereafter, means each Index Rate Reset Date through and including the day immediately preceding the next succeeding Index Rate Reset Date.

Index Rate Period shall mean the period from (and including) the date on which the 2023D Subordinated Bonds begin to bear interest in the Index Mode to (but excluding) the earliest to occur of (i) the Business Day immediately succeeding the last day thereof, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of the 2023D Subordinated Bonds have been redeemed or defeased in full and (iv) the final Maturity Date.

Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Percentage shall mean, upon any conversion to an Index Rate Period, the percentage of the Index determined by the Remarketing Agent in accordance with Section 88.10; provided, however, that the Index Percentage shall never be less than 65% unless a Favorable Opinion of Bond Counsel is delivered on or before the determination of the Index Percentage by the Remarketing Agent.

Index Spread shall mean, upon any conversion to an Index Rate Period, the fixed per annum rate determined by the Remarketing Agent in accordance with Section 88.10.

Interest Accrual Period shall mean the period during which a 2023D Subordinated Bond accrues interest payable on the next Interest Payment Date applicable thereto. Each Interest Accrual Period for 2023D Subordinated Bonds shall be the period commencing on (and including) the last Interest Payment Date to which interest has been paid

(or, if no interest has been paid in such Interest Rate Mode, commencing on (and including) the date of original authentication and delivery of the 2023D Subordinated Bonds, or the Conversion Date, as the case may be) to (and excluding) the Interest Payment Date on which interest is to be paid. If, at the time of authentication of any 2023D Subordinated Bond, interest is in default or overdue on the 2023D Subordinated Bonds, such 2023D Subordinated Bond shall bear interest from the date to which interest has previously been paid in full or made available for payment in full on Outstanding 2023D Subordinated Bonds.

Interest Payment Date shall mean each date on which interest is to be paid and is: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2023D Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2023D Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day specified (a) in the Sales Certificate in connection with the initial issuance of the 2023D Subordinated Bonds or (b) in writing by the District in connection with the Conversion Date to such Term Rate Mode or Fixed Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the applicable Reimbursement Agreement or Liquidity Facility.

Interest Period shall mean, for 2023D Subordinated Bonds in a particular Interest Rate Mode, the period of time that such 2023D Subordinated Bonds bear interest at the rate (per annum) which becomes effective at the beginning of such period, and shall include a Flexible Rate Period, a Daily Rate Period, a Weekly Rate Period, a Direct Purchase Index Rate Effective Period, an Index Rate Effective Period, a Term Rate Period and a Fixed Rate Period.

Interest Rate Mode shall mean, as the context may require, the Flexible Mode, the Daily Mode, the Weekly Mode, the Direct Purchase Index Mode, the Index Mode, the Term Rate Mode or the Fixed Rate Mode.

Liquidity Facility shall mean, with respect to the 2023D Subordinated Bonds, a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof and then in effect and providing for the payment of the Purchase Price of Tendered Bonds and upon replacement of such Liquidity Facility with an Alternate Liquidity Facility, the Alternate Liquidity Facility then in effect.

Liquidity Facility Purchase Account shall mean the account by that name in the Purchase Fund created by Section 90.09.

Liquidity Provider shall mean, with respect to the 2023D Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Liquidity Facility, if any, then in effect for the 2023D Subordinated Bonds.

Liquidity Provider Bonds shall mean any 2023D Subordinated Bonds purchased by the Liquidity Provider with funds drawn on or advanced under the Liquidity Facility or Credit Enhancement, as applicable.

Long-Term Mode shall mean a Term Rate Mode or a Fixed Rate Mode.

Mandatory Purchase Date shall mean: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such Flexible Rate Bond, (ii) with respect to 2023D Subordinated Bonds in the Term Rate Mode, the first Business Day following the last day of each Term Rate Period applicable to such 2023D Subordinated Bonds, (iii) with respect to any 2023D Subordinated Bonds, any Conversion Date applicable to such 2023D Subordinated Bond (except, unless otherwise specified in writing by the District in connection with a conversion of the Interest Rate Mode to the Daily Mode or the Weekly Mode, any Conversion Date in respect of a conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode) or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 88.11 not failed to occur (except, unless otherwise specified in writing by the District in connection with a conversion of the Interest Rate Mode to the Daily Mode or the Weekly Mode, any such date in respect of a proposed conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode), (iv) with respect to any 2023D Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2023D Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility supporting such 2023D Subordinated Bonds, (vi) with respect to any 2023D Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility, which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023D Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee's receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023D Subordinated Bonds and in no event later than the Business Day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2023D Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2023D Subordinated Bonds (other than interest on 2023D Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2023D Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee's receipt of such notice, (viii) with respect to 2023D Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee's receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023D Subordinated Bonds, (ix) with respect to 2023D Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2023D Subordinated Bonds, and (x) with respect to 2023D Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Market Agent shall mean the Person appointed by the District to serve as market agent in connection with a conversion to any Direct Purchase Index Rate Period.

Maturity Date shall mean the maturity date or maturity dates of the 2023D Subordinated Bonds set forth in the Sales Certificate, or, if established pursuant to Section 88.11(b)(v) upon a change to the Fixed Rate Mode, the Serial Maturity Dates.

Maximum Rate shall mean (i) with respect to Liquidity Provider Bonds and 2023D Subordinated Bonds in the Direct Purchase Index Mode, a rate of interest per annum not exceeding the maximum non-usurious lawful rate of interest permitted by applicable laws and (ii) with respect to all other 2023D Subordinated Bonds, a rate of interest of twelve percent (12%) per annum unless a lesser rate of interest is specified as the Maximum Rate in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period.

Moody's shall mean Moody's Investors Service and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

New Mode shall have the meaning specified in Section 88.11(a).

Notice Parties shall mean the Trustee, the Remarketing Agent, if any, the Paying Agent, the Credit Provider, if any, the Liquidity Provider, if any, the Bank, if any, the Market Agent, if any, and the Calculation Agent, if any.

Opinion of Counsel shall mean a written legal opinion from a firm of attorneys experienced in the matters to be covered in the opinion.

Outstanding, when used with reference to 2023D Subordinated Bonds, shall mean, as of any date, 2023D Subordinated Bonds theretofore or thereupon being authenticated and delivered under this Fifteenth Supplemental Resolution except:

(i) 2023D Subordinated Bonds cancelled by the Trustee, or delivered to the Trustee for cancellation, at or prior to such date;

(ii) 2023D Subordinated Bonds paid or deemed paid pursuant to Section 10.01 of the Subordinate Master Resolution; and

(iii) 2023D Subordinated Bonds in lieu of or in substitution for which other 2023D Subordinated Bonds shall have been authenticated and delivered pursuant to this Fifteenth Supplemental Resolution.

Person shall mean an individual, a corporation, a partnership, an association, a joint venture, a trust, an unincorporated organization or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

Principal Payment Date shall mean any date upon which the principal amount of 2023D Subordinated Bonds is due under the Subordinate Master Resolution, including any Maturity Date, any Serial Maturity Date, any Redemption Date, or the date the maturity of any 2023D Subordinated Bond is accelerated pursuant to the terms of the Subordinate Master Resolution.

Purchase Date shall mean (i) for a 2023D Subordinated Bond in the Daily Mode or the Weekly Mode, any Business Day selected by the Beneficial Owner of said 2023D Subordinated Bond pursuant to the provisions of Section 90.01, and (ii) any Mandatory Purchase Date.

Purchase Fund shall mean the fund by that name created in Section 90.09.

Purchase Price shall mean an amount equal to the principal amount of any 2023D Subordinated Bonds purchased on any Purchase Date, plus accrued interest to but excluding the Purchase Date; provided, however, that (i) if the Purchase Date for any 2023D Subordinated Bond to be purchased is an Interest Payment Date for such 2023D Subordinated Bond, the Purchase Price thereof shall be the principal amount thereof, and interest on such 2023D Subordinated Bond shall be paid to the Holder of such 2023D Subordinated Bond pursuant to the Subordinate Master Resolution and this Fifteenth Supplemental Resolution and (ii) in the case of a purchase on a Conversion Date or proposed Conversion Date which is preceded by a Term Rate Period or an Index Rate Period and which occurs prior to the day originally established as the last day of such preceding Term Rate Period or Index Rate Period, the Purchase Price of any 2023D Subordinated Bond to be purchased on such Conversion Date shall be the Redemption Price which would have been applicable to such 2023D Subordinated Bond if the preceding Term Rate Period or Index Rate Period had continued to the day originally established as its last day, plus accrued interest, if any.

Rate Determination Date shall mean any date on which the interest rate on 2023D Subordinated Bonds shall be determined, which, (i) in the case of the Flexible Mode, shall be the first day of an Interest Period; (ii) in the case of the Daily Mode, shall be each Business Day commencing with the first day (which must be a Business Day) the 2023D Subordinated Bonds become subject to the Daily Mode; (iii) in the case of the Weekly Mode, shall be (A) each Wednesday or, if Wednesday is not a Business Day, then the Business Day next succeeding such Wednesday, and (B) not later than the Business Day preceding a Conversion Date, a Substitution Date or a Mandatory Purchase Date specified in clause (viii) of the definition of Mandatory Purchase Date; (iv) in the case of the Term Rate Mode, shall be a Business Day no later than the Business Day next preceding the first day of an Interest Period, as determined by the Remarketing Agent; (v) in the case of the Direct Purchase Index Mode, each Direct Purchase Index Rate Determination Date; (vi) in the case of the Index Mode, each Index Rate Determination Date, and (vii) in the case of the Fixed Rate Mode, shall be a date determined by the Remarketing Agent which shall be at least one Business Day prior to the Conversion Date.

Rating Agencies shall mean any of Moody's, S&P or Fitch, which is then providing a rating on the 2023D Subordinated Bonds at the request of the District.

Record Date shall mean (i) with respect to 2023D Subordinated Bonds in a Daily Mode, Weekly Mode, Flexible Mode, Direct Purchase Index Mode or Index Mode, the last Business Day before an Interest Payment Date, and (ii) with respect to 2023D Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, the fifteenth (15th) day (whether or not a Business Day) next preceding each Interest Payment Date.

Redemption Date shall mean the date fixed for redemption of 2023D Subordinated Bonds subject to redemption in any notice of redemption given in accordance with the terms of the Subordinate Master Resolution.

Redemption Price shall mean an amount equal to the principal of and premium, if any, and accrued interest, if any, on the 2023D Subordinated Bonds to be paid on the Redemption Date.

Reimbursement Agreement shall mean any reimbursement agreement, credit agreement, line of credit agreement, standby purchase agreement or other agreement by and between a Credit Provider or Liquidity Provider, as applicable, and the District.

Remarketing Agent shall mean any investment banking firm which may be appointed with respect to the 2023D Subordinated Bonds pursuant to Section 91.01.

Remarketing Agreement shall mean any agreement relating to the 2023D Subordinated Bonds by and between the District and a Remarketing Agent, as it may be amended or supplemented from time to time in accordance with its terms.

Remarketing Proceeds Account shall mean the account by that name in the Purchase Fund created in Section 90.09.

Representations Letter shall mean the Letter of Representations from the District to the Securities Depository in connection with the 2023D Subordinated Bonds in a book-entry system, as supplemented and amended from time to time.

Sales Certificate shall mean a written certificate of the District executed by the Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District or the designee of any of them prior to the issuance of the 2023D Subordinated Bonds setting forth the principal amount, Maturity Date or Maturity Dates, initial Interest Rate Mode, initial interest rate or rates, and such other matters with respect to the 2023D Subordinated Bonds as such officer may deem appropriate, as provided in Section 88.02.

S&P shall mean S&P Global Ratings and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “S&P” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent, if any.

S&P Municipal Bond 7 Day High Grade Rate Index shall mean for a Rate Determination Date, the level of the “S&P Municipal Bond 7 Day High Grade Rate Index”

(formerly known as the J.J. Kenny Index) maintained by Standard and Poor's for a one-week maturity as published each day.

Securities Depository shall mean The Depository Trust Company, and such other securities depository as the District may designate in a certificate of the District delivered to the Trustee.

Serial Bonds shall mean the 2023D Subordinated Bonds maturing on the Serial Maturity Dates, as determined pursuant to Section 88.11(b).

Serial Maturity Dates shall mean the dates on which the Serial Bonds mature, as determined pursuant to Section 88.11(b).

Serial Payments shall mean the payments to be made in payment of the principal of the Serial Bonds on the Serial Maturity Dates.

Short-Term Mode shall mean the Daily Mode, the Weekly Mode or the Flexible Mode.

SIFMA Index shall mean, for any applicable Rate Determination Date, the level of the index which is issued weekly and which is compiled from the weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meet specific criteria established from time to time by SIFMA and issued on Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day. If the SIFMA Index is no longer published, then "SIFMA Index" shall mean the S&P Municipal Bond 7 Day High Grade Rate Index. If the S&P Municipal Bond 7 Day High Grade Rate Index is no longer published, then "SIFMA Index" shall mean the prevailing rate determined by the Calculation Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Calculation Agent to be comparable under the circumstances to the criteria used by SIFMA to determine the SIFMA Index immediately prior to the date on which SIFMA ceased publication of the SIFMA Index. Notwithstanding the foregoing, if the SIFMA Index as determined as provided above would be less than 0.0%, then the SIFMA Index will be deemed to be 0.0%.

Substitution Date shall mean the date upon which an Alternate Credit Enhancement or Alternate Liquidity Facility is scheduled to be substituted for a Credit Enhancement or Liquidity Facility then in effect.

Taxable Date shall mean the date on which interest on the 2023D Subordinated Bonds is first includable in gross income of the Holder (including, without limitation, any previous Holder) thereof as a result of an Event of Taxability as such a date is established pursuant to a Determination of Taxability.

Taxable Rate shall mean an interest rate per annum at all times equal to the product of the Direct Purchase Index Rate then in effect multiplied by the Taxable Rate Factor.

Taxable Rate Factor shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Tendered Bonds shall mean 2023D Subordinated Bonds tendered for purchase by the Holders or Beneficial Owners thereof pursuant to Section 90.01 or subject to mandatory tender for purchase on a Mandatory Purchase Date pursuant to Section 90.02.

Tender Notice shall mean a notice delivered by Electronic Means or in writing with respect to a 2023D Subordinated Bond that states (i) the principal amount of such 2023D Subordinated Bond to be purchased pursuant to Section 90.01, (ii) the Purchase Date on which such 2023D Subordinated Bond is to be purchased, (iii) applicable payment instructions with respect to the 2023D Subordinated Bonds being tendered for purchase and (iv) an irrevocable demand for such purchase.

Tender Notice Deadline with respect to a 2023D Subordinated Bond shall mean (i) during a Daily Mode with respect to such 2023D Subordinated Bond, 11:00 a.m. on any Business Day and (ii) during a Weekly Mode with respect to such 2023D Subordinated Bond, 5:00 p.m. on a Business Day not less than seven days prior to the applicable Purchase Date.

Term Rate shall mean the per annum interest rate for 2023D Subordinated Bonds in the Term Rate Mode determined pursuant to Section 88.07(a).

Term Rate Mode shall mean the Interest Rate Mode during which the 2023D Subordinated Bonds bear interest at the Term Rate.

Term Rate Period shall mean the period from (and including) the date on which the 2023D Subordinated Bonds begin to bear interest in a Term Rate Mode to (but excluding) the commencement date of the next succeeding Interest Period, including another Term Rate Period.

2023 Tax Certificate shall mean the Tax Certificate executed and delivered by the District in connection with the issuance of the 2023D Subordinated Bonds, as amended or supplemented from time to time in accordance with its terms.

Weekly Mode shall mean the Interest Rate Mode during which the 2023D Subordinated Bonds bear interest at the Weekly Rate.

Weekly Rate shall mean the per annum interest rate on 2023D Subordinated Bonds in the Weekly Mode determined pursuant to Section 88.06(b).

Weekly Rate Period shall mean the period during which a 2023D Subordinated Bond in the Weekly Mode shall bear a Weekly Rate, which shall be the period commencing on Thursday of each week to and including Wednesday of the following week, except (i) the first Weekly Rate Period, which shall be from the Conversion Date on which the Interest Rate Mode for the 2023D Subordinated Bonds is changed to a Weekly Mode to and including the Wednesday of the following week, and (ii) the last Weekly Rate Period which shall end on the day preceding the earliest to occur of the Conversion Date on which the Interest Rate Mode for the 2023D Subordinated Bonds is changed from the Weekly Mode to a different Interest Rate Mode, the Maturity Date or the Mandatory Purchase Date for such 2023D Subordinated Bond.

ARTICLE LXXXVIII

THE 2023D SUBORDINATED BONDS

Section 88.01. Authorization and Purpose of 2023D Subordinated Bonds.

The Board hereby authorizes the issuance of a series of revenue bonds of the District in accordance with the Subordinate Master Resolution, designated as “Subordinated Electric Revenue Bonds, 2023 Series D” (the “2023D Subordinated Bonds”) for the purpose of (i) financing and refinancing improvements and additions to the District’s Electric System, including through the payment of all or a portion of the District’s outstanding commercial paper notes (to the extent set forth in the Sales Certificate), (ii) refunding the Refunded Bonds (to the extent set forth in the Sales Certificate), and (iii) paying costs of issuance (to the extent set forth in the Sales Certificate).

Section 88.02. Terms, Registration, Denominations, Medium, Method and Place of Payment and Dating of 2023D Subordinated Bonds.

(a) The 2023D Subordinated Bonds shall be issued in the aggregate principal amount which, together with the aggregate principal amount, if any, of the District’s Electric Revenue Bonds sold and issued pursuant to the District’s Sixty-Sixth Supplemental Resolution adopted on the date hereof, Subordinated Electric Revenue Refunding Bonds, 2023 Series C, Subordinated Electric Revenue Bonds, 2023 Series E, and Subordinated Electric Revenue Refunding Bonds, 2023 Series F, shall not exceed \$630,000,000, shall bear interest at such initial rate or rates for such initial Interest Period, shall bear interest in such initial Interest Rate Mode, shall mature and become payable as to principal on such Maturity Date or Maturity Dates (not to exceed forty (40) years from the date of issuance of the 2023D Subordinated Bonds) in the amount and be subject to such mandatory sinking fund account payments on such mandatory sinking fund account payment dates, if any, all as set forth in the Sales Certificate. In addition to the provisions required pursuant to the terms of this Fifteenth Supplemental Resolution to be specified in the Sales Certificate, the Sales Certificate may contain such provisions, in a form approved by the District’s Bond Counsel and the District’s counsel, as the officer executing the Sales Certificate may deem necessary or desirable and consistent with the purpose of this Fifteenth Supplemental Resolution, including provisions (i) adding additional covenants and agreements to be observed by the District, (ii) curing, correcting, amending or supplementing any ambiguous, defective or ineffective provision contained in the Subordinate Master Resolution or this Fifteenth Supplemental Resolution, or (iii) amending or supplementing any provision contained herein to the extent necessary to obtain Credit Enhancement or a Liquidity Facility, to obtain a rating on the 2023D Subordinated Bonds, or to provide for the issuance of the 2023D Subordinated Bonds if, in the judgment of such officer such rating or provision is reasonable. The Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District, or the designee of any of them, is hereby authorized and instructed to execute and deliver the Sales Certificate and, upon execution and delivery thereof, the Sales Certificate shall be incorporated herein and in the Subordinate Master Resolution by reference. The execution and delivery of the Sales Certificate by any such officer shall be conclusive evidence that, where any approval, determination of necessity, desirability or consistency with the purpose of this Fifteenth Supplemental Resolution, or judgment or

determination of reasonableness is required to be given or made, such approval, judgment or determination has been given or made.

(b) The 2023D Subordinated Bonds shall be issued in the form of fully registered 2023D Subordinated Bonds in Authorized Denominations and no provision of the Subordinate Master Resolution relating to coupon bonds or coupons shall apply to the 2023D Subordinated Bonds. 2023D Subordinated Bonds (other than 2023D Subordinated Bonds in the Direct Purchase Index Mode) shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2023D Subordinated Bonds and shall be registered as set forth in Section 92.04 of this Fifteenth Supplemental Resolution. 2023D Subordinated Bonds in the Direct Purchase Index Mode shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2023D Subordinated Bonds and shall be registered in the name of the Holder thereof or as otherwise directed by such Holder. Registered ownership of the 2023D Subordinated Bonds, or any portion thereof, may not thereafter be transferred except as set forth in the Continuing Covenant Agreement (during any time that the 2023D Subordinated Bonds are in the Direct Purchase Index Mode), Section 2.05 of the Subordinate Master Resolution and Section 92.04 of this Fifteenth Supplemental Resolution. Each 2023D Subordinated Bond in the Direct Purchase Index Mode shall contain a legend indicating that the transferability of such 2023D Subordinated Bond is subject to the restrictions set forth in this Fifteenth Supplemental Resolution.

(c) The 2023D Subordinated Bonds shall be dated as of the date of their initial issuance and shall be numbered in such manner as is determined by the Trustee.

(d) The principal of and premium, if any, and interest on the 2023D Subordinated Bonds shall be payable in lawful money of the United States of America.

(e) Subject to Section 92.04 of this Fifteenth Supplemental Resolution, interest on the 2023D Subordinated Bonds shall be paid on each Interest Payment Date by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode by check mailed on the date on which due to the Holders of the 2023D Subordinated Bonds at the close of business on the Record Date for the 2023D Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2023D Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2023D Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2023D Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of \$1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2023D Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2023D Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2023D Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2023D Subordinated Bonds registered in the name of the Securities Depository (or its nominee), interest on any such 2023D Subordinated Bond shall be payable only upon surrender of such 2023D Subordinated Bond at the office of the Paying Agent.

(f) Subject to Section 92.04 of this Fifteenth Supplemental Resolution, the principal of and premium, if any, on each 2023D Subordinated Bond shall be payable on the Principal Payment Date of such 2023D Subordinated Bond upon surrender thereof at the office of the Paying Agent; provided that the Paying Agent may agree with the Holder of any 2023D Subordinated Bond (and hereby does so agree with the Bank during any Direct Purchase Index Rate Period) that such Holder may, in lieu of surrendering the same for a new 2023D Subordinated Bond, endorse on such 2023D Subordinated Bond a record of partial payment of the principal of such 2023D Subordinated Bond in the form set forth below (which shall be typed or printed on such 2023D Subordinated Bond):

PAYMENTS ON ACCOUNT OF PRINCIPAL

Payment Date	Principal Amount Paid	Balance of Principal Amount Unpaid	Signature of Holder
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The Paying Agent shall maintain a record of each such partial payment made in accordance with the foregoing agreement and such record of the Paying Agent shall be conclusive. Such partial payment shall be valid upon payment of the amount thereof to the Holder of such 2023D Subordinated Bond, and the District, the Trustee and the Paying Agent shall be fully released and discharged from all liability to the extent of such payment regardless of whether such endorsement shall or shall not have been made upon such 2023D Subordinated Bond by the Holder thereof and regardless of any error or omission in such endorsement.

(g) Except as may be specifically set forth herein, the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District may treat the Holder of a 2023D Subordinated Bond as the absolute owner thereof for all purposes, whether or not such 2023D Subordinated Bond shall be overdue, and the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District shall not be affected by any knowledge or notice to the contrary. Payment of the principal of and premium, if any, and interest on each 2023D Subordinated Bond shall be made only to such Holder, which payments shall be valid and effectual to satisfy and discharge the liability of such 2023D Subordinated Bond to the extent of the sum or sums so paid. All 2023D Subordinated Bonds paid at maturity or on earlier redemption pursuant to the provisions of this Section shall be cancelled by the Paying Agent.

(h) Each 2023D Subordinated Bond shall bear interest at the applicable rate or rates during each applicable Interest Accrual Period until the entire Principal Amount thereof has been paid.

(i) The Sales Certificate shall designate the series, amounts and maturity or sinking fund payment dates of the Refunded Bonds, if any.

Section 88.03. Payment of Principal and Interest of 2023D Subordinated Bonds; Acceptance of Terms and Conditions.

(a) The interest on each 2023D Subordinated Bond shall become due and payable on the Interest Payment Dates with respect to such 2023D Subordinated Bond to and including the Maturity Date of such 2023D Subordinated Bond, and on each Redemption Date and on the date of any acceleration prior thereto. The principal of each 2023D Subordinated Bond shall become due and payable on the Principal Payment Date of such 2023D Subordinated Bond.

(b) By the acceptance of its 2023D Subordinated Bond, the Holder thereof shall be deemed to have agreed to all the terms and provisions of such 2023D Subordinated Bond as specified in such 2023D Subordinated Bond and the Subordinate Master Resolution, including without limitation the applicable Interest Periods, interest rates (including any applicable Alternate Rate), Purchase Dates, Mandatory Purchase Dates, Purchase Prices, mandatory and optional purchase and redemption provisions applicable to such 2023D Subordinated Bond, method and timing of purchase, redemption and payment. Such Holder further agrees that if, on any date upon which its 2023D Subordinated Bond is to be purchased, redeemed or paid at maturity or earlier due date, funds are on deposit with the Paying Agent or the Trustee to pay the full amount due on such 2023D Subordinated Bond, then such Holder shall have no rights under the Subordinate Master Resolution other than to receive such full amount due with respect to such 2023D Subordinated Bond and that interest on such 2023D Subordinated Bond shall cease to accrue as of such date.

(c) Notwithstanding anything herein to the contrary, while any 2023D Subordinated Bonds are Liquidity Provider Bonds, such Liquidity Provider Bonds shall bear interest and be payable at the times, in the manner and in the amounts required under the Liquidity Facility supporting such 2023D Subordinated Bonds or the Reimbursement Agreement related thereto.

Section 88.04. Calculation and Payment of Interest; Change in Interest Rate Mode; Maximum Rate.

(a) When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is the SIFMA Index, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is an index other than the SIFMA Index, interest shall be calculated on the basis specified in writing by the District on or before the first day of the applicable Direct Purchase Index Rate Period or Index Rate Period. When a Short-Term Mode is in effect, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Term Rate Mode or a Fixed Rate Mode is in effect, interest shall be calculated on the basis of a 360-day year comprised of twelve 30-day months. Payment of unpaid interest accrued on each 2023D Subordinated Bond during each Interest Accrual Period shall be made on the applicable Interest Payment Date for such 2023D Subordinated Bond to the Holder of record of such 2023D Subordinated Bond on the applicable Record Date.

(b) The 2023D Subordinated Bonds in any Interest Rate Mode other than a Fixed Rate Mode may be changed to any other Interest Rate Mode at the times and in the manner hereinafter provided. Subsequent to such change in Interest Rate Mode (other than a change to a Fixed Rate Mode), the 2023D Subordinated Bonds may again be changed to a different Interest Rate Mode at the times and in the manner hereinafter provided. A Fixed Rate Mode shall be in effect until the Maturity Date, or acceleration thereof prior to the Maturity Date, and the 2023D Subordinated Bonds in a Fixed Rate Mode may not be changed to any other Interest Rate Mode.

(c) Subject to Section 88.09(b)(iii), no 2023D Subordinated Bonds shall bear interest at an interest rate higher than the Maximum Rate with respect thereto.

(d) In the absence of manifest error, the determination of interest rates (including any determination of rates in connection with a New Mode) and Interest Periods by the Remarketing Agent or the Calculation Agent, as applicable, as provided herein, and the record of interest rates maintained by the Paying Agent shall be conclusive and binding upon the Remarketing Agent, the Paying Agent, the Trustee, the District, the Holders and the Beneficial Owners.

Section 88.05. Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and in Section 88.04 hereof, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2023D Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2023D Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2023D Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2023D Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2023D Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or

Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Section 88.06. Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2023D Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023D Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period. In making any such determination the Remarketing Agent shall not take into account the per annum rate of interest that would be applicable to Liquidity Provider Bonds pursuant to the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

(a) During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

(b) During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Section 88.07. Determination of Term Rates and Fixed Rates.

(a) Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. Except as set forth in Section 88.11(a)(ii), the Term Rate shall be the minimum rate which, in the sole judgment of the Remarketing Agent, would result in a sale of such 2023D Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected, and the Call Protection Date specified, by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

(b) Fixed Rates. The Remarketing Agent shall determine the Fixed Rate for 2023D Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2023D Subordinated Bonds will have Serial Maturity Dates in accordance with Section 88.11(b)(v)). Except as set forth in Section 88.11(b)(v), the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2023D Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 88.11(b)(v), the Fixed Rate so established shall remain in effect until the Maturity Date of such 2023D Subordinated Bonds.

Section 88.08. Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2023D Subordinated Bonds (other than 2023D Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2023D Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2023D Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2023D Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2023D Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2023D Subordinated Bonds.

(a) For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2023D Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

(b) For 2023D Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2023D Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

Section 88.09. Determination of Direct Purchase Index Rates.

(a) During each Direct Purchase Index Rate Period, the 2023D Subordinated Bonds shall, subject to subsection (b) of this Section 88.09, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2023D Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2023D Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2023D Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2023D Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Master Resolution or this Fifteenth Supplemental Resolution to the contrary, including, without limitation, Section 90.02(b), but subject to Section 88.04(c) and Section 88.09(b)(ii) and (iii), from and after any Taxable Date, the interest rate on 2023D Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Master Resolution or this Fifteenth Supplemental Resolution to the contrary, including, without limitation, Section 90.02(b), but subject to Section 88.04(c) and Section 88.09(b)(iii), from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2023D Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2023D

Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Master Resolution or this Fifteenth Supplemental Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2023D Subordinated Bonds exceeds the Maximum Rate for such 2023D Subordinated Bonds, then (A) such 2023D Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2023D Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2023D Subordinated Bonds as calculated pursuant to this Section 88.09 and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2023D Subordinated Bonds as calculated pursuant to this Section 88.09 is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2023D Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2023D Subordinated Bonds are redeemed or tendered for purchase in accordance with this Fifteenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2023D Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything herein to the contrary, but subject to Section 88.04(c) and Section 88.09(b)(i), (ii) and (iii) during any Amortization Period, the 2023D Subordinated Bonds shall bear interest at the Bank Rate.

Section 88.10. Determination of Index Rates. During each Index Rate Period, the 2023D Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2023D Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2023D Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2023D Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2023D Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2023D Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2023D Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2023D Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the District shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2023D Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All

dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2023D Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Section 88.11. Changes in Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. Subject to the provisions of this Section, the District may effect a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period with respect to the 2023D Subordinated Bonds by following the procedures set forth in this Section.

(a) Changes to Interest Rate Modes Other Than Fixed Rate Mode; Changes in Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. The Interest Rate Mode for the 2023D Subordinated Bonds (other than the 2023D Subordinated Bonds in the Fixed Rate Mode) may be changed from one Interest Rate Mode to another Interest Rate Mode (other than the Fixed Rate Mode) and the Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2023D Subordinated Bonds may be changed, as follows:

(i) Notice to Notice Parties; Notice to Holders. No later than a Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2023D Subordinated Bonds preceding the proposed Conversion Date, the District shall give written notice to the Notice Parties of its intention to effect a change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period from the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period then prevailing (for purposes of this Section, the “Current Mode”) to another Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period (for purposes of this Section, the “New Mode”) specified in such written notice. Notice of the proposed change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be given by the Trustee by mail to the Holders of the 2023D Subordinated Bonds not less than the 10th day next preceding the proposed Conversion Date, provided that no notice need be given for a Conversion Date occurring on the Business Day following the last day of a Flexible Rate Period, an Index Rate Period or a Term Rate Period or on a Substitution Date. Such notice shall state: (1) the proposed Conversion Date; (2) that the 2023D Subordinated Bonds will be subject to mandatory tender for purchase on the proposed Conversion Date (regardless of whether all of the conditions to the change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period are satisfied); and (3) the Purchase Price of the 2023D Subordinated Bonds and the place of delivery for purchase of the 2023D Subordinated Bonds; provided that, if the proposed change is from one Direct Purchase Index Rate Period to a new Direct Purchase Index Rate Period and any Holder of the 2023D Subordinated Bonds shall continue to be a Holder of 2023D Subordinated Bonds

in the new Direct Purchase Index Rate Period, the Holder may elect to retain its 2023D Subordinated Bonds by filing with the District and the Trustee not less than five days prior to the proposed Conversion Date a written notice identifying such 2023D Subordinated Bonds and the principal amount it wishes to retain.

(ii) Determination of Interest Rates. The New Mode shall commence on the Conversion Date and the interest rate(s) (together, in the case of a change to the Flexible Mode, with the Interest Period(s)) shall be determined in the manner provided in Sections 88.05, 88.06, 88.07, 88.09 and 88.10, as applicable; provided, however, that, in the case of a change to the Term Rate Mode, or from one Term Rate Period to a new Term Rate Period, if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to sell some or all of the 2023D Subordinated Bonds at a premium or a discount to par.

(iii) Conditions Precedent.

(1) The Conversion Date shall be:

(A) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2023D Subordinated Bonds end;

(B) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(C) in the case of a change from the Term Rate Mode to another Interest Rate Mode, or from one Term Rate Period to a new Term Rate Period, any day on which the applicable 2023D Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(D) in the case of a change from the Index Mode to another Interest Rate Mode, or from one Index Rate Period to a new Index Rate Period, any day on which the applicable 2023D Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(E) in the case of a change from the Direct Purchase Index Mode or from one Direct Purchase Index Rate Period to another Direct Purchase Index Rate Period, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(2) If the 2023D Subordinated Bonds to be converted are Flexible Rate Bonds, no Interest Period with respect to such 2023D Subordinated Bonds set after delivery by

the District to the Remarketing Agent of the notice of the intention to effect a change in Interest Rate Mode shall extend beyond the proposed Conversion Date.

(3) The following items shall have been delivered to the District and the Trustee, on or prior to the Conversion Date:

(A) a Favorable Opinion of Bond Counsel dated the Conversion Date; and

(B) if there is to be a Liquidity Facility or an Alternate Liquidity Facility or Credit Enhancement or an Alternate Credit Enhancement delivered in connection with such change, the items required by Section 90.08(d).

(4) If no Liquidity Facility is in effect to provide funds for the purchase of 2023D Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 90.04 shall not be less than the amount required to purchase all of the 2023D Subordinated Bonds on the Conversion Date at the Purchase Price.

(b) Change to Fixed Rate Mode. At the option of the District, the Interest Rate Mode for the 2023D Subordinated Bonds may be changed to the Fixed Rate Mode as provided in this Section 88.11(b). On any Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2023D Subordinated Bonds before the proposed Conversion Date pursuant to clause (ii) of this subsection (b), the District shall give written notice to the Notice Parties stating that the Interest Rate Mode will be changed to the Fixed Rate Mode and setting forth the proposed Conversion Date. In addition, such notice shall state whether some or all of the 2023D Subordinated Bonds to be converted shall be converted to Serial Bonds and, if so, the applicable Serial Maturity Dates and Serial Payments, all as determined pursuant to clause (v) of this subsection (b). Any such change in Interest Rate Mode shall be made as follows:

(i) Conversion Date. The Conversion Date shall be:

(1) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2023D Subordinated Bonds end;

(2) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(3) in the case of a change from the Term Rate Mode, any day on which the applicable 2023D Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(4) in the case of a change from the Index Mode, any day on which the applicable 2023D Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(5) in the case of a change from the Direct Purchase Index Mode, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(ii) Notice to Holders. Not less than the 10th day next preceding the Conversion Date, the Trustee shall mail, in the name of the District, a notice of such proposed change to the Holders of the 2023D Subordinated Bonds stating that the Interest Rate Mode will be changed to the Fixed Rate Mode, the proposed Conversion Date and that such Holder is required to tender such Holder's 2023D Subordinated Bonds for purchase on such proposed Conversion Date.

(iii) General Provisions Applying to Change to Fixed Rate Mode. The change to the Fixed Rate Mode shall not occur unless the following items shall have been delivered to the District and the Trustee and the following conditions shall have been satisfied, in each case on or prior to the Conversion Date:

(1) a Favorable Opinion of Bond Counsel dated the Conversion Date;

(2) if there is to be Credit Enhancement or Alternate Credit Enhancement delivered in connection with such change, the items required by Section 90.08(d) in connection with the delivery of Credit Enhancement or Alternate Credit Enhancement; and

(3) if no Liquidity Facility is in effect to provide funds for the purchase of 2023D Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 90.04 shall not be less than the amount required to purchase all of the 2023D Subordinated Bonds on the Conversion Date at the Purchase Price.

(iv) Determination of Interest Rate. The Fixed Rate (or Fixed Rates in the case of Serial Bonds) for the 2023D Subordinated Bonds to be converted to the Fixed Rate Mode shall be established by the Remarketing Agent on the Rate Determination Date applicable thereto pursuant to the provisions of Section 88.07(b). Such Fixed Rate or Fixed Rates shall remain in effect until the Maturity Date or Serial Maturity Dates, as applicable, of such 2023D Subordinated Bonds. Such determination shall be conclusive and binding upon the District, the Trustee, the Credit Provider, if any, and the Holders of the 2023D Subordinated Bonds to which such rate will be applicable. Not later than 5:00 p.m. on the date of determination of the Fixed Rate, the Remarketing Agent shall notify the District, the Trustee and the Credit Provider, if any, of such rate by telephone.

(v) Serialization and Sinking Fund Account Redemption; Price. Upon conversion of the 2023D Subordinated Bonds to the Fixed Rate Mode, the 2023D Subordinated Bonds shall be remarketed at par, shall mature on the same Maturity Date and be subject to the same mandatory sinking fund account redemption, if any, and optional redemption provisions as set forth in this Fifteenth Supplemental Resolution prior to the Conversion; provided, however, that if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to (1) have some of the 2023D Subordinated Bonds be Serial Bonds and some subject to mandatory sinking fund

account redemption even if such 2023D Subordinated Bonds were not Serial Bonds or subject to mandatory sinking fund account redemption prior to such change, (2) change the optional redemption dates and/or premiums set forth in Section 89.03(b), and/or (3) sell some or all of the 2023D Subordinated Bonds at a premium or a discount to par.

(c) Failure to Satisfy Conditions Precedent to an Interest Rate Mode Change.

In the event the conditions described above in subsections (a) or (b), as applicable, of this Section have not been satisfied by the applicable Conversion Date, then the New Mode shall not take effect (although any mandatory tender shall be made on such date if notice has been sent to the Holders stating that such 2023D Subordinated Bonds would be subject to mandatory purchase on such date). If the failed change in Interest Rate Mode was from the Flexible Mode, such 2023D Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the failed Conversion Date in accordance with Section 88.05. If the failed change in Interest Rate Mode was from the Daily Mode, such 2023D Subordinated Bonds shall remain in the Daily Mode, and if the failed change in Interest Rate Mode was from the Weekly Mode, such 2023D Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in accordance with the applicable provisions of Section 88.06 on and as of the failed Conversion Date. If the failed change in Interest Rate Mode was from the Term Rate Mode, then such 2023D Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 88.07. If the failed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2023D Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 88.09. If the failed change in Interest Rate Mode was from the Index Mode, then the 2023D Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 88.10.

(d) Rescission of Election. Notwithstanding anything herein to the contrary,

the District may rescind any election by it to change an Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period as described above prior to the Conversion Date by giving written notice thereof to the Notice Parties prior to 10:00 a.m. on the Business Day preceding such Conversion Date. If the Trustee receives notice of such rescission prior to the time the Trustee has given notice to the Holders of the 2023D Subordinated Bonds, then such notice of change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be of no force and effect. If the Trustee receives notice from the District of rescission of a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period after the Trustee has given notice thereof to the Holders of the 2023D Subordinated Bonds, then, if the proposed Conversion Date would have been a Mandatory Purchase Date, such date shall continue to be a Mandatory Purchase Date and the Interest Rate Mode for the 2023D Subordinated Bonds shall be determined as set forth in the remainder of this paragraph. If the proposed change in Interest Rate Mode was from the Flexible Mode, such 2023D Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the proposed Conversion Date in accordance with Section 88.05. If the proposed change in Interest Rate Mode was from the Daily Mode, such 2023D Subordinated Bonds shall remain in the Daily Mode, and if the proposed change in Interest Rate Mode was from the Weekly Mode, such 2023D Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in

accordance with the applicable provisions of Section 88.06 on and as of the proposed Conversion Date. If the proposed change in Interest Rate Mode was from the Term Rate Mode, then such 2023D Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 88.07. If the proposed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2023D Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 88.09. If the proposed change in Interest Rate Mode was from the Index Mode, then the 2023D Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 88.10.

ARTICLE LXXXIX

REDEMPTION OF 2023D SUBORDINATED BONDS

Section 89.01. Optional Redemption of Flexible Rate Bonds. 2023D Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2023D Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Section 89.02. Optional Redemption of 2023D Subordinated Bonds in the Daily Mode and the Weekly Mode. 2023D Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023D Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 89.03. Optional Redemption of 2023D Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

(a) 2023D Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2023D Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2023D Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2023D Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(b) 2023D Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2023D Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(c) The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2023D Subordinated Bonds so changed to a Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

(d) Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2023D Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Section 89.04. Optional and Mandatory Redemption of 2023D Subordinated Bonds in the Direct Purchase Index Mode.

(a) Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2023D Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023D Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

(b) 2023D Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 89.05. Mandatory Sinking Fund Account Redemption of 2023D Subordinated Bonds and Redemption of Liquidity Provider Bonds.

(a) The 2023D Subordinated Bonds shall be subject to redemption prior to maturity from mandatory sinking fund account payments for the 2023D Subordinated Bonds on the dates, if any, specified in the Sales Certificate, at a Redemption Price equal to the principal amount of the 2023D Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The mandatory sinking fund account payments for the 2023D Subordinated Bonds shall be in the amounts and payable on the dates set forth in the Sales Certificate.

(b) Notwithstanding anything herein to the contrary, Liquidity Provider Bonds are subject to redemption on the dates, in the amounts and otherwise in accordance with the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

Section 89.06. Funds for Redemption of 2023D Subordinated Bonds. Unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023D Subordinated Bonds, the Redemption Price of 2023D Subordinated Bonds

(other than Liquidity Provider Bonds) shall be paid solely from (1) moneys obtained from a drawing on the Credit Enhancement supporting the 2023D Subordinated Bonds pursuant to Section 90.08(a) or (2) Available Moneys.

Section 89.07. Selection of 2023D Subordinated Bonds for Redemption.

Whenever provision is made for the redemption of less than all of the 2023D Subordinated Bonds of any one maturity, the Trustee shall select the 2023D Subordinated Bonds to be redeemed, from the Outstanding 2023D Subordinated Bonds of such maturity not previously called for redemption, by lot in any manner which the Trustee deems fair; provided, however, that Liquidity Provider Bonds shall be redeemed prior to the redemption of other 2023D Subordinated Bonds; provided further, however, that during a Direct Purchase Index Rate Period, the 2023D Subordinated Bonds shall be redeemed pro rata. The Trustee shall promptly notify the District in writing of the numbers of the 2023D Subordinated Bonds so selected for redemption.

Section 89.08. Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2023D Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2023D Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023D Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2023D Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2023D Subordinated Bonds to be redeemed, and shall also state that the interest on the 2023D Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023D Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2023D Subordinated Bonds to be redeemed.

Notice of optional redemption shall be given by the Trustee for and on behalf of the District, at the written request of the District (which request shall be given to the Trustee (unless waived by the Trustee) at least twenty-five (25) days prior to the date fixed for redemption or such shorter period as is acceptable to the Trustee). Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption.

Notwithstanding the foregoing, notice of redemption shall not be required for 2023D Subordinated Bonds redeemed on a Mandatory Purchase Date.

Section 89.09. Partial Redemption of 2023D Subordinated Bond. Upon surrender of any 2023D Subordinated Bond redeemed in part only, the District shall execute and the Trustee shall deliver to the registered owner thereof, at the expense of the District, a new 2023D Subordinated Bond or Bonds, of the same maturity, of Authorized Denominations in

aggregate principal amount equal to the unredeemed portion of the 2023D Subordinated Bond surrendered.

Section 89.10. Effect of Redemption. Notice of redemption having been duly given as aforesaid, and moneys for payment of the Redemption Price being held by the Trustee, the 2023D Subordinated Bonds so to be redeemed shall, on the date designated in such notice, become due and payable at the Redemption Price specified in such notice; and from and after the date so designated interest on the 2023D Subordinated Bonds so designated for redemption shall cease to accrue and the Holders and Beneficial Owners of said 2023D Subordinated Bonds shall have no rights in respect thereof, except to receive payment of the Redemption Price thereof.

Section 89.11. Disposition of Redeemed 2023D Subordinated Bonds. All 2023D Subordinated Bonds redeemed pursuant to the provisions of this Article LXXXIX shall be delivered to and cancelled by the Trustee and shall thereafter be delivered by the Trustee to, or upon the order of, the District, and no 2023D Subordinated Bonds shall be issued in place thereof.

ARTICLE XC

PURCHASE OF 2023D SUBORDINATED BONDS

Section 90.01. Optional Tenders of 2023D Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 90.06, the Beneficial Owners of 2023D Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2023D Subordinated Bonds (or portions of those 2023D Subordinated Bonds, provided that no 2023D Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Section 90.02. Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode.

(a) The 2023D Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2023D Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2023D Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2023D Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2023D

Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

(b) Notwithstanding subparagraph (a) above and anything to the contrary in this Fifteenth Supplemental Resolution, in the event the 2023D Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2023D Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2023D Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing, in which case the 2023D Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2023D Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2023D Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2023D Subordinated Bonds may be subject to optional redemption or purchase at the sole option of the District at any time with notice as and to the extent provided in the Continuing Covenant Agreement.

Section 90.03. Remarketing of 2023D Subordinated Bonds; Notices.

(a) Remarketing of 2023D Subordinated Bonds. The Remarketing Agent shall use its best efforts pursuant to the terms and conditions of the Remarketing Agreement to offer for sale:

(i) all 2023D Subordinated Bonds or portions thereof as to which a Tender Notice has been delivered pursuant to Section 90.01; and

(ii) all 2023D Subordinated Bonds required to be purchased on a Mandatory Purchase Date described in clauses (i), (ii), (iii), (iv), (viii) or (ix) of the definition thereof; and

(iii) any Liquidity Provider Bonds (A) purchased on a Purchase Date described in clause (i) or (ii) above, (B) with respect to which the Liquidity Provider has provided notice to the Trustee and the Remarketing Agent that it has reinstated the Available Amount, (C) with respect to which an Alternate Liquidity Facility and Alternate Credit Enhancement is in effect (if such funds were secured by a Credit Enhancement prior to becoming Liquidity Provider Bonds, which Credit Enhancement is no longer in effect), and/or (D) which are being marketed as Fixed Rate Bonds.

The Remarketing Agent shall not remarket 2023D Subordinated Bonds to the District or any affiliate thereof. In connection with the remarketing of any 2023D Subordinated Bonds with respect to which notice of redemption or notice of mandatory purchase has been

given, the Remarketing Agent shall notify each person to which such 2023D Subordinated Bonds are remarketed of such notice of redemption or notice of mandatory purchase.

Anything in this Fifteenth Supplemental Resolution to the contrary notwithstanding, if there shall have occurred and be continuing either a Credit Provider Failure or a Liquidity Provider Failure with respect to a Series of 2023D Subordinated Bonds, the Remarketing Agent shall not remarket such 2023D Subordinated Bonds. All other provisions of this Fifteenth Supplemental Resolution, including without limitation, those relating to the setting of interest rates and Interest Periods and mandatory and optional purchases, shall remain in full force and effect during the continuance of such Credit Provider Failure or Liquidity Provider Failure.

(b) Notice of Remarketing; Registration Instructions; New Bonds. On each date on which a 2023D Subordinated Bond is to be purchased pursuant to this Article XC:

(i) the Remarketing Agent shall notify the Trustee by Electronic Means by 11:30 a.m. if it has been unable to remarket any tendered 2023D Subordinated Bonds, and shall include in such notice the principal amount of 2023D Subordinated Bonds it has been unable to remarket;

(ii) the Remarketing Agent shall notify the Trustee by Electronic Means not later than 1:00 p.m. of the names of the purchasers of the successfully remarketed 2023D Subordinated Bonds and such information as may be necessary to register the 2023D Subordinated Bonds and the registration instructions with respect thereto;

(iii) the Remarketing Agent shall cause the proceeds of the remarketing by such Remarketing Agent of tendered 2023D Subordinated Bonds to be paid to the Trustee in immediately available funds not later than 12:00 noon on the Purchase Date for such 2023D Subordinated Bonds; and

(iv) if the 2023D Subordinated Bonds are not in the Book-Entry System, the Trustee shall authenticate new 2023D Subordinated Bonds for the respective purchasers thereof which shall be available for pick-up by the Remarketing Agent not later than 2:30 p.m.

(c) Draw on Liquidity Facility or Request for Funds. On each date on which a 2023D Subordinated Bond is to be purchased pursuant to this Article XC, if (i) the Remarketing Agent shall have given notice to the Trustee pursuant to clause (b)(i) above that it has been unable to remarket any of the 2023D Subordinated Bonds or (ii) the Trustee has not received from the Remarketing Agent an amount sufficient to pay the Purchase Price of tendered Bonds, by 12:00 noon on the Purchase Date, then the Trustee shall draw on the applicable Liquidity Facility (or if no Liquidity Facility, request funds from the District) by 12:15 p.m. in an amount equal to the Purchase Price of all such 2023D Subordinated Bonds which have not been successfully remarketed, requesting payment not later than 2:45 p.m. on the Purchase Date. Subject to Section 90.04, if a Liquidity Facility is in effect, the Trustee shall also give the District notice by 2:45 p.m. on the Purchase Date if it does not have funds in the Remarketing Proceeds

Account and the Liquidity Facility Purchase Account sufficient to pay the Purchase Price of 2023D Subordinated Bonds tendered on such Purchase Date. Any draw on a Liquidity Facility to be made on a Substitution Date shall be on the Liquidity Facility being replaced.

Section 90.04. Source of Funds for Purchase of 2023D Subordinated Bonds.

By 3:00 p.m. on the date on which a 2023D Subordinated Bond is to be purchased pursuant to this Article XC, and except as set forth in Section 90.06(b)(ii), the Trustee shall purchase tendered 2023D Subordinated Bonds from the tendering Holders at the applicable Purchase Price by wire transfer in immediately available funds. Funds for the payment of such Purchase Price shall be derived solely from the following sources in the order of priority indicated and neither the Trustee nor the Remarketing Agent shall be obligated to provide funds from any other source:

(a) immediately available funds on deposit in the Remarketing Proceeds Account established for the 2023D Subordinated Bonds;

(b) immediately available funds on deposit in the Liquidity Facility Purchase Account established for the 2023D Subordinated Bonds; and

(c) moneys of the District on deposit in the District Purchase Account established for the 2023D Subordinated Bonds.

If no Liquidity Facility is in effect with respect to the 2023D Subordinated Bonds, then the District shall be obligated to deposit amounts into the District Purchase Account established for the 2023D Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023D Subordinated Bonds are insufficient therefor. If a Liquidity Facility is in effect with respect to the 2023D Subordinated Bonds, then the District may, but shall not be obligated to, deposit amounts into the District Purchase Account established for the 2023D Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023D Subordinated Bonds and the Liquidity Facility Purchase Account established for the 2023D Subordinated Bonds are insufficient therefor. If so specified in the Sales Certificate with respect to the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period, the failure of the District to deposit amounts into the District Purchase Account when the District is obligated to deposit such amounts under this Section 90.04 shall constitute an “event of default” under Section 9.01 of the Subordinate Master Resolution.

Section 90.05. Delivery of Subordinated Bonds. On each date on which a 2023D Subordinated Bond is to be purchased pursuant to this Article XC, such 2023D Subordinated Bond shall be delivered as follows:

(a) 2023D Subordinated Bonds sold by the Remarketing Agent and described in Section 90.04(a) shall be delivered by the Remarketing Agent to the purchasers of such 2023D Subordinated Bonds by 3:00 p.m.;

(b) 2023D Subordinated Bonds purchased by the Trustee with moneys described in Section 90.04(b) shall be registered immediately in the name of the Liquidity

Provider or its nominee (which may be the Securities Depository) or as otherwise specified in writing by the Liquidity Provider and held as specified in writing by the Liquidity Provider, in either case on or before 3:00 p.m.; and

(c) 2023D Subordinated Bonds purchased by the District with moneys described in Section 90.04(c) shall be registered immediately in the name of the District or its nominee on or before 3:00 p.m. 2023D Subordinated Bonds so owned by the District shall continue to be Outstanding under the terms of the Subordinate Master Resolution and be subject to all of the terms and conditions of the Subordinate Master Resolution and shall be subject to remarketing by the Remarketing Agent.

When any Liquidity Provider Bonds are remarketed, the Trustee shall not release 2023D Subordinated Bonds so remarketed to the Remarketing Agent until the Trustee has received confirmation that the Liquidity Facility has been reinstated.

Section 90.06. Book-Entry Tenders.

(a) Notwithstanding any other provision of this Article XC to the contrary, all tenders for purchase during any period in which the 2023D Subordinated Bonds are registered in the name of any Securities Depository or its nominee shall be subject to the terms and conditions set forth in the Representations Letter and to any regulations promulgated by the Securities Depository. During any period that the 2023D Subordinated Bonds are registered in the name of DTC or its nominee, the tender option rights of holders of 2023D Subordinated Bonds may be exercised only by a Direct Participant of DTC acting, directly or indirectly, on behalf of a Beneficial Owner of 2023D Subordinated Bonds by giving notice of its election to tender 2023D Subordinated Bonds or portions thereof at the times and in the manner described above. Beneficial Owners will not have any rights to tender 2023D Subordinated Bonds directly to the Trustee. Procedures under which a Beneficial Owner may direct a Direct Participant or DTC, or an Indirect Participant of DTC acting through a Director Participant of DTC, to exercise a tender option right in respect of 2023D Subordinated Bonds or portions thereof in an amount equal to all or a portion of such Beneficial Owner's beneficial ownership interest therein shall be governed by standing instructions and customary practices determined by such Direct Participant or Indirect Participant. During any period that the 2023D Subordinated Bonds are registered in the name of DTC or its nominee, delivery of 2023D Subordinated Bonds required to be tendered for purchase shall be effected by the transfer by a Direct Participant on the applicable Purchase Date of a book-entry credit to the account of the Trustee of a beneficial ownership interest in such 2023D Subordinated Bonds.

(b) Notwithstanding anything expressed or implied herein to the contrary, during any period that a Book-Entry System for the 2023D Subordinated Bonds is maintained by the District:

(i) there shall be no requirement of physical delivery to or by the Trustee or the Remarketing Agent of:

(1) any 2023D Subordinated Bonds subject to mandatory or optional purchase as a condition to the payment of the Purchase Price therefor;

(2) any 2023D Subordinated Bonds that have become Liquidity Provider Bonds; or

(3) any remarketing proceeds of such 2023D Subordinated Bonds or Liquidity Provider Bonds; and

(ii) except as provided in (iii) below, neither the Trustee nor the Paying Agent shall have any responsibility for paying the Purchase Price of any tendered 2023D Subordinated Bond or for remitting remarketing proceeds to any Person; and

(iii) the Trustee's sole responsibilities in connection with the purchase and remarketing of a tendered 2023D Subordinated Bond shall be to:

(1) draw upon the Liquidity Facility to pay the Purchase Price of 2023D Subordinated Bond in the manner provided herein and to remit the amount so drawn to or upon the order of the Securities Depository for the benefit of the tendering Beneficial Owners; and

(2) remit any proceeds derived from the remarketing of a Liquidity Provider Bond and any unused proceeds from a drawing on the Liquidity Facility to the Liquidity Provider.

Section 90.07. No Book-Entry System. During any period that the 2023D Subordinated Bonds shall not be in a Book-Entry System, the following procedures shall be followed:

(a) 2023D Subordinated Bonds shall be delivered (with all necessary endorsements) at or before 12:00 noon on the Purchase Date at the office of the Paying Agent in New York, New York; provided, however, that payment of the Purchase Price shall be made pursuant to this Section only if the 2023D Subordinated Bond so delivered to the Paying Agent conforms in all respects to the description thereof in the notice described in this Section. Payment of the Purchase Price with respect to purchases under this Section shall be made to the Holders of tendered 2023D Subordinated Bonds by wire transfer in immediately available funds by the Paying Agent by 3:00 p.m. on the Purchase Date.

(b) If a 2023D Subordinated Bond to be purchased pursuant to this Article XC is not delivered by the Holder to the Paying Agent by 12:00 noon on the date in which such 2023D Subordinated Bond is to be purchased, the Paying Agent shall hold any funds received for the purchase of those 2023D Subordinated Bonds in trust in a separate account and shall pay such funds to the former Holders of the 2023D Subordinated Bonds upon presentation of the 2023D Subordinated Bonds. Such undelivered 2023D Subordinated Bonds shall cease to accrue interest as to the former Holders on such purchase date and moneys representing the Purchase Price shall be available against delivery of those 2023D Subordinated Bonds at the Principal Office of the Paying Agent; provided, however, that any funds which shall be so held by the Paying Agent and which remain unclaimed by the former Holder of a 2023D Subordinated Bond not presented for purchase for a period of two years after delivery of such funds to the Paying Agent, shall, to the extent permitted by law, upon request in writing by the District and the furnishing of security or indemnity to the Paying Agent's satisfaction, be paid to the District free of any trust or lien and thereafter the former Holder of such 2023D Subordinated Bond shall look

only to the District and then only to the extent of the amounts so received by the District without any interest thereon and the Paying Agent shall have no further responsibility with respect to such moneys or payment of the Purchase Price of such 2023D Subordinated Bonds. The Paying Agent shall authenticate a replacement 2023D Subordinated Bond for any undelivered 2023D Subordinated Bond which may then be remarketed by the Remarketing Agent.

(c) The Paying Agent shall hold all 2023D Subordinated Bonds properly tendered to it for purchase hereunder as agent and bailee of, and in escrow for the benefit of, the respective Holders of the 2023D Subordinated Bonds which shall have so tendered such 2023D Subordinated Bonds until moneys representing the Purchase Price of such 2023D Subordinated Bonds shall have been delivered to or for the account of or to the order of such Holders.

Section 90.08. Credit Enhancement and Liquidity Facility.

(a) While a Credit Enhancement is in effect with respect to the 2023D Subordinated Bonds, the Trustee shall, on the Business Day preceding each Interest Payment Date and Principal Payment Date draw on the Credit Enhancement in accordance with the terms thereof so as to receive thereunder with respect to the 2023D Subordinated Bonds secured by the Credit Enhancement by 1:00 p.m. on said Interest Payment Date and Principal Payment Date, an amount, in immediately available funds, equal to the amount of interest and principal payable on such 2023D Subordinated Bonds on such Interest Payment Date and Principal Payment Date. The proceeds of such draws shall be deposited in a separate account in the Subordinated Bond Interest and Principal Fund and shall be applied to pay principal of and interest on such 2023D Subordinated Bonds prior to the application of any other funds held by the Trustee therefor. Amounts held in such account shall be held uninvested and separate and apart from all other funds and accounts. Such accounts shall at all times be Eligible Accounts.

(b) If a Liquidity Facility is in effect with respect to the 2023D Subordinated Bonds, on each date on which a 2023D Subordinated Bond is to be purchased, the Trustee, by demand given by Electronic Means by 12:15 p.m., shall draw on the Liquidity Facility in accordance with the terms thereof so as to receive thereunder by 2:45 p.m. on such date an amount, in immediately available funds, sufficient, together with the proceeds of the remarketing of such 2023D Subordinated Bonds on such date, to enable the Trustee to pay the Purchase Price in connection therewith. The Trustee shall deposit said proceeds in the Liquidity Facility Purchase Account established for the 2023D Subordinated Bonds pursuant to Section 90.09(b) hereof.

(c) Notwithstanding the foregoing paragraphs of this Section, if the Credit Provider and the Liquidity Provider are the same entity, the Trustee shall not draw on the Credit Enhancement with respect to any payments due or made in connection with Liquidity Provider Bonds. In no event shall the Trustee draw on the Credit Enhancement or Liquidity Facility with respect to any payments made or made in connection with 2023D Subordinated Bonds not covered by the Credit Enhancement or Liquidity Facility or 2023D Subordinated Bonds owned by the District.

(d) The District may provide an Alternate Credit Enhancement or Alternate Liquidity Facility on any day on which 2023D Subordinated Bonds to be secured by such

Alternate Credit Enhancement or Alternate Liquidity Facility are subject to redemption at par and not later than the fifth (5th) Business Day prior to the Expiration Date of the Credit Enhancement or Liquidity Facility then in effect and supporting such 2023D Subordinated Bonds. The District shall give the Notice Parties written notice of the proposed substitution of an Alternate Credit Enhancement or Alternate Liquidity Facility no less than two (2) Business Days prior to the date on which the Trustee is required to provide notice of the proposed substitution to the Holders of the 2023D Subordinated Bonds. The Trustee shall give notice of such Substitution Date in accordance with Section 90.02. On or before the Substitution Date there shall be delivered to the Trustee (i) the Alternate Credit Enhancement or the Alternate Liquidity Facility in substitution for the Credit Enhancement or Liquidity Facility then in effect, (ii) a Favorable Opinion of Bond Counsel, (iii) a written Opinion of Counsel for the provider of the Alternate Credit Enhancement or Alternate Liquidity Facility, as applicable, to the effect that such Alternate Credit Enhancement or Alternate Liquidity Facility is a valid, legal and binding obligation of the provider thereof, and (iv) unless waived by such entity, written evidence satisfactory to the Credit Provider and the Liquidity Provider of the provision for purchase from the Liquidity Provider of all Liquidity Provider Bonds, at a price equal to the principal amount thereof plus accrued and unpaid interest, and payment of all amounts due to the Credit Provider and the Liquidity Provider under the applicable Reimbursement Agreement or Liquidity Facility on or before the effective date of such Alternate Credit Enhancement or Alternate Liquidity Facility. Upon the satisfaction of the conditions described in the preceding sentence, the Trustee shall accept such Alternate Credit Enhancement or Alternate Liquidity Facility on the close of business on the Substitution Date and shall surrender the Credit Enhancement or Liquidity Facility then in effect to the provider thereof on the Substitution Date; provided, however, that the Trustee shall not surrender the Credit Enhancement or Liquidity Facility then in effect unless and until the Trustee has received all amounts drawn thereunder. If any condition to the substitution is not satisfied, the substitution shall not occur but the 2023D Subordinated Bonds shall remain subject to mandatory purchase on the proposed Substitution Date.

(e) In the event of an extension of the Expiration Date, the District shall give to the Notice Parties, a written notice of the new Expiration Date at least fifteen (15) days prior to the fifth Business Day prior to the Expiration Date in effect prior to such extension.

(f) The references to Credit Enhancement and Liquidity Facility and Credit Provider and Liquidity Provider shall be disregarded during any period during which a Credit Enhancement or Liquidity Facility, as applicable, is not in effect.

(g) The Trustee shall not have any lien on or security interest in any amounts drawn under a Credit Enhancement or a Liquidity Facility or any amounts on deposit in the account described in Section 90.08(a) above in which proceeds of draws on a Credit Enhancement are deposited or a Liquidity Facility Purchase Account.

(h) If at any time during the term of a Credit Enhancement and/or Liquidity Facility any successor Trustee shall be appointed and qualified under the Subordinate Master Resolution, the resigning or removed Trustee shall request that the Credit Provider and/or Liquidity Provider, as applicable, transfer such Credit Enhancement and/or Liquidity Facility to the successor Trustee and such resignation or removal of the Trustee shall not be effective until the Credit Enhancement and/or Liquidity Facility has been duly transferred (including the

payment of any required transfer fee) to such successor Trustee. If the resigning or removed Trustee fails to make this request, the successor Trustee shall do so before accepting appointment.

(i) The Trustee may accept, hold and draw upon a Credit Enhancement and/or a Liquidity Facility issued by itself or by any of its corporate affiliates to provide security and a source of payment for the 2023D Subordinated Bonds. The Trustee covenants that it shall at all times maintain adequate controls to manage any potential conflict of interest. Notwithstanding any other provision herein to the contrary, while the Credit Provider and/or Liquidity Provider is the Trustee or an affiliate of the Trustee and such Credit Provider and/or Liquidity Provider has not failed to honor a properly presented draw on the Credit Enhancement and/or Liquidity Facility, the Trustee shall have no discretion with respect to the acceleration of the 2023D Subordinated Bonds and shall do so only upon the written direction of such Credit Provider and/or Liquidity Provider and as otherwise permitted by the Subordinate Master Resolution. The Trustee shall immediately tender its resignation and take prompt steps to have a successor trustee appointed satisfying the requirements of the Subordinate Master Resolution if such affiliated Credit Provider and/or Liquidity Provider shall fail at any time to honor a properly presented and conforming draw on the Credit Enhancement and/or Liquidity Facility.

Section 90.09. Purchase Fund. There is hereby established and there shall be maintained with the Trustee a separate fund to be known as the “Purchase Fund.” The Trustee shall further establish separate accounts within the Purchase Fund to be known as the “Liquidity Facility Purchase Account”, the “Remarketing Proceeds Account” and the “District Purchase Account”. At any time at which there is a Liquidity Facility in effect with respect to the 2023D Subordinated Bonds, the Purchase Fund shall be required to be an Eligible Account.

(a) Remarketing Proceeds Account. Upon receipt of the proceeds of a remarketing of a 2023D Subordinated Bond on the date such 2023D Subordinated Bond is to be purchased, the Trustee shall deposit such proceeds in the Remarketing Proceeds Account for application to the Purchase Price of such 2023D Subordinated Bond. Notwithstanding the foregoing, upon the receipt of the proceeds of a remarketing of Liquidity Provider Bonds, the Trustee shall immediately pay such proceeds to the Liquidity Provider to the extent of any amount owing to the Liquidity Provider.

(b) Liquidity Facility Purchase Account. Upon receipt of the immediately available funds pursuant to Section 90.08(b), the Trustee shall deposit such money in the Liquidity Facility Purchase Account for application to the Purchase Price of the 2023D Subordinated Bonds to the extent that the moneys on deposit in the Remarketing Proceeds Account shall not be sufficient. Any amounts deposited in the Liquidity Facility Purchase Account and not needed with respect to the Purchase Price of any 2023D Subordinated Bonds shall be immediately returned to the Liquidity Provider.

(c) District Purchase Account. Upon receipt of funds from the District pursuant to Section 90.04, the Trustee shall deposit such funds in the District Purchase Account for application to the Purchase Price of the 2023D Subordinated Bonds. Any amounts deposited in the District Purchase Account and not needed with respect to the Purchase Price for any 2023D Subordinated Bonds shall be immediately returned to the District.

(d) Investment. Amounts held in the Liquidity Facility Purchase Account, the Remarketing Proceeds Account and the District Purchase Account by the Trustee shall be held uninvested and separate and apart from all other funds and accounts.

Section 90.10. Inadequate Funds for Tenders.

(a) If moneys sufficient to pay the Purchase Price of all Tendered Bonds to be purchased on any Purchase Date are not available (1) no purchase shall be consummated of Tendered Bonds on such Purchase Date; (2) all Tendered Bonds shall be returned to the Holders thereof; and (3) all remarketing proceeds with respect to the 2023D Subordinated Bonds shall be returned to the Remarketing Agent for return to the Persons providing such moneys. Thereafter, the Trustee shall continue to take all such action available to it to obtain remarketing proceeds with respect to all Tendered Bonds from the Remarketing Agent and sufficient other funds from the Liquidity Provider, if any, or, subject to Section 90.04, the District to effect a subsequent successful remarketing or purchase of any Tendered Bonds.

(b) All Tendered Bonds (other than Liquidity Provider Bonds and 2023D Subordinated Bonds in the Direct Purchase Index Mode) shall bear interest at the Maximum Rate (or such lower interest rate or rates specified in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period) during the period of time from and including the applicable Purchase Date to (but not including) the date that all such Tendered Bonds are successfully remarketed, redeemed, purchased or paid (the “Delayed Remarketing Period”).

(c) The District may direct the conversion of the Tendered Bonds to a different Interest Rate Mode, Index Rate Period or Term Rate Period during the Delayed Remarketing Period in accordance with Section 88.11 hereof; provided that the District shall not be required to comply with the notice requirements described in Section 88.11.

(d) Subject to the terms of the Remarketing Agreement, if any, the Remarketing Agent shall continue to use its best efforts to remarket all of the Tendered Bonds at rates up to and including the Maximum Rate.

(e) During the Delayed Remarketing Period, the Trustee may, upon direction of the District, apply amounts on deposit in the Redemption Fund to the redemption of such Tendered Bonds, as a whole or in part on any Business Day during the Delayed Remarketing Period, at a redemption price equal to the principal amount thereof, together with interest accrued thereon to the date fixed for redemption, without premium. Notwithstanding Section 89.08 to the contrary, the Trustee shall give five Business Days’ notice of such redemption to the Holders of the 2023D Subordinated Bonds to be redeemed.

(f) During the Delayed Remarketing Period, interest on such Tendered Bonds (other than 2023D Subordinated Bonds in the Direct Purchase Index Mode) shall be paid to the Holders thereof (i) on the first Business Day of each calendar month occurring during the Delayed Remarketing Period and (ii) on the last day of the Delayed Remarketing Period.

ARTICLE XCI

REMARKETING AGENT

Section 91.01. Appointment of Remarketing Agent.

(a) The Remarketing Agent shall be appointed pursuant to the Remarketing Agreement to remarket 2023D Subordinated Bonds pursuant to this Fifteenth Supplemental Resolution and perform the other duties of the Remarketing Agent described hereunder, and to keep such books and records as shall be consistent with prudent industry practice and to make such books and records available for inspection by the District and the Trustee at all reasonable times. The Remarketing Agent shall act as such under the Remarketing Agreement.

(b) The Remarketing Agent may at any time resign and be discharged of the duties and obligations created by this Fifteenth Supplemental Resolution as set forth in the Remarketing Agreement. The Remarketing Agent may suspend its remarketing efforts as set forth in the Remarketing Agreement. The Remarketing Agent may be removed at any time, at the direction of the District as set forth in the Remarketing Agreement. Any successor Remarketing Agent shall be selected by the District, and shall be a member of the Financial Industry Regulatory Authority, or its successors, shall have a capitalization of at least fifteen million dollars (\$15,000,000), shall be authorized by law to perform all the duties set forth in this Fifteenth Supplemental Resolution and shall be acceptable to the Credit Provider and Liquidity Provider. The District's delivery to the Trustee of a certificate setting forth the effective date of the appointment of a successor Remarketing Agent and the name of such successor shall be conclusive evidence that (i) if applicable, the predecessor Remarketing Agent has been removed in accordance with the provisions of this Fifteenth Supplemental Resolution and (ii) such successor has been appointed and is qualified to act as Remarketing Agent under the terms of this Fifteenth Supplemental Resolution.

(c) If the Remarketing Agent consolidates with, merges or converts into, or transfers all or substantially all of its assets (or, in the case of a bank, national banking association or trust company, its corporate assets) to, another corporation, the resulting, surviving or transferee corporation without any further act shall be the successor Remarketing Agent.

ARTICLE XCII

MISCELLANEOUS

Section 92.01. 2023D Subordinated Sinking Fund Account; Payments of Interest, Principal and Redemption Price and Defeasance While Credit Enhancement in Effect.

(a) An account is hereby established within the Subordinated Bonds Interest and Principal Fund to be designated the "Series 2023D Sinking Fund Account." The Treasurer shall deposit in the Series 2023D Sinking Fund Account the mandatory sinking fund account payments in the amounts, on the mandatory sinking fund account payment dates, set forth in

Section 89.05(a) and shall transfer such amounts to the Trustee on such date for application as provided in Section 92.01(b).

(b) On each mandatory sinking fund account payment date established for the 2023D Subordinated Bonds, the Trustee shall apply the mandatory sinking fund account payment required on that date to the redemption (or payment at maturity, as the case may be) of the 2023D Subordinated Bonds for which the mandatory sinking fund account payment has been made, upon the notice and in the manner provided in Section 89.08; provided that, at any time prior to giving such notice of such redemption, the Trustee shall, upon direction of the District, apply such moneys to the purchase of such 2023D Subordinated Bonds at public or private sale, as and when and at such prices (including brokerage and other charges, but excluding accrued interest) as the District may direct, except that the purchase price (excluding accrued interest) shall not exceed the par amount of such 2023D Subordinated Bonds. If, during the twelve-month period immediately preceding said mandatory sinking fund account payment date, the Trustee has purchased 2023D Subordinated Bonds with moneys in the Series 2023D Sinking Fund Account, or, during said period and prior to giving said notice of redemption, the District has deposited 2023D Subordinated Bonds with the Trustee, such 2023D Subordinated Bonds so purchased or deposited or redeemed shall be applied, to the extent of the full principal amount thereof, to reduce said mandatory sinking fund account payment. All 2023D Subordinated Bonds purchased or deposited pursuant to this subsection shall be cancelled and destroyed by the Trustee. All 2023D Subordinated Bonds purchased from the Series 2023D Sinking Fund Account or deposited by the District with the Trustee shall be allocated first to the next succeeding mandatory sinking fund account payment, then to the remaining mandatory sinking fund account payments as selected by the District.

(c) Any moneys remaining in the Series 2023D Sinking Fund Account after all 2023D Subordinated Bonds have been retired shall be returned to the District for any lawful District use.

(d) Notwithstanding the foregoing provisions of this Section 92.01 or Section 5.02 or any other provision of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023D Subordinated Bonds, the principal and Redemption Price of, and interest on, the 2023D Subordinated Bonds shall be paid solely (1) first, from moneys obtained from a drawing on the Credit Enhancement pursuant to Section 90.08(a) and (2) second, in the event moneys are not available pursuant to clause (1) for such purpose for any reason, from Available Moneys and moneys on deposit in the Series 2023D Sinking Fund Account shall be withdrawn by the Trustee and used solely for the purpose of reimbursing the Credit Provider for drawings under the Credit Enhancement. To the extent the Credit Provider honors a drawing under the Credit Enhancement for the purpose of paying the principal or Redemption Price of, or interest on, the 2023D Subordinated Bonds, the District shall receive a credit against its obligation to make deposits into the Subordinated Bonds Interest and Principal Fund and shall not be required to transfer funds to the Trustee in the amount of such drawing.

(e) Notwithstanding the provisions of Article X of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023D Subordinated Bonds, 2023D Subordinated

Bonds shall not be deemed defeased or otherwise paid or satisfied unless such 2023D Subordinated Bonds are defeased with (1) moneys obtained from a drawing on the Credit Enhancement pursuant to Section 90.08(a), (2) Available Moneys or (3) Defeasance Securities acquired with moneys described in (1) or (2). Any Defeasance Securities used to defease 2023D Subordinated Bonds for which Credit Enhancement is in effect shall be not callable by the issuer thereof prior to maturity and shall mature no later than the earlier of (x) the first day upon which such 2023D Subordinated Bonds may be tendered or (y) the first day upon which such 2023D Subordinated Bonds may be redeemed. For purpose of Article X of the Subordinate Master Resolution, interest on the 2023D Subordinated Bonds shall be calculated based on an assumed interest rate equal to the Maximum Rate for periods for which the actual interest rate on the 2023D Subordinated Bonds cannot be determined.

Section 92.02. Form and Execution of 2023D Subordinated Bonds. The 2023D Subordinated Bonds, and the certificate of authentication and registration to be executed thereon, shall be in substantially the form set forth as Exhibit A to this Fifteenth Supplemental Resolution.

The 2023D Subordinated Bonds shall be executed in the name and on behalf of the District with the manual or facsimile signature of the President or Vice President of its Board of Directors. The 2023D Subordinated Bonds shall then be delivered to the Trustee for authentication by it. In case any officer who shall have signed any of the 2023D Subordinated Bonds shall cease to be such officer of the District before the 2023D Subordinated Bonds so signed shall have been authenticated or delivered by the Trustee or issued by the District, such 2023D Subordinated Bonds may nevertheless be authenticated, delivered and issued and, upon such authentication, delivery and issue, shall be as binding upon the District as though those who signed the same had continued to be such officer of the District, and also any 2023D Subordinated Bond may be signed on behalf of the District by such person as at the actual date of execution of such 2023D Subordinated Bond shall be the proper officer of the District although at the nominal date of such 2023D Subordinated Bond any such person shall not have been such officer of the District.

Only such of the 2023D Subordinated Bonds as shall bear thereon a certificate of authentication substantially in the form set forth in Exhibit A to this Fifteenth Supplemental Resolution, manually executed by an authorized signatory of the Trustee, shall be valid or obligatory for any purpose or entitled to the benefits of the Subordinate Master Resolution, and such certificate of the Trustee shall be conclusive evidence that the 2023D Subordinated Bonds so authenticated have been duly executed, authenticated and delivered hereunder and are entitled to the benefits of the Subordinate Master Resolution.

Section 92.03. Issuance of 2023D Subordinated Bonds. At any time after the adoption of this Fifteenth Supplemental Resolution, the District may execute and deliver the 2023D Subordinated Bonds in the aggregate principal amount set forth in the Sales Certificate. The Trustee shall authenticate and deliver the 2023D Subordinated Bonds upon written order of the District. The proceeds of the sale of the 2023D Subordinated Bonds shall be deposited and applied as set forth in the Sales Certificate.

Section 92.04. Use of Depository. Notwithstanding any provision of the Subordinate Master Resolution or this Fifteenth Supplemental Resolution to the contrary:

(a) The 2023D Subordinated Bonds shall be initially issued as provided in Section 88.02; provided, that 2023D Subordinated Bonds in the Direct Purchase Index Mode shall be issued in definitive certificated form registered in the name of the Holder thereof or as otherwise directed by the Holder. 2023D Subordinated Bonds in any other Interest Rate Mode shall be registered in the name of Cede & Co. or as otherwise directed by the Securities Depository and registered ownership thereof, or any portion thereof, may not thereafter be transferred except:

(i) To any successor of DTC or its nominee, or to any substitute depository designated pursuant to clause (ii) of this subsection (a) (“substitute depository”); provided that any successor of DTC or substitute depository shall be qualified under any applicable laws to provide the service proposed to be provided by it;

(ii) To any substitute depository not objected to by the Trustee, upon (1) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository or (2) a determination by the District that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; provided that any such substitute depository shall be qualified under any applicable laws to provide the services proposed to be provided by it; or

(iii) To any person as provided below, upon (1) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository; provided that no substitute depository which is not objected to by the Trustee can be obtained or (2) a determination by the District that it is in the best interests of the District to remove DTC or its successor (or any substitute depository or its successor) from its functions as depository.

(b) In the case of any transfer pursuant to clause (i) or clause (ii) of subsection 92.04(a) hereof, upon receipt of all outstanding 2023D Subordinated Bonds by the Trustee, together with a Certificate of the District to the Trustee, a single new 2023D Subordinated Bond shall be executed and delivered for each maturity of 2023D Subordinated Bonds then outstanding registered in the name of such successor or such substitute depository, or their nominees, as the case may be, all as specified in such Certificate of the District. In the case of any transfer pursuant to clause (iii) of subsection 92.04(a) hereof, upon receipt of all outstanding 2023D Subordinated Bonds by the Trustee together with a Certificate of the District to the Trustee, new 2023D Subordinated Bonds shall be executed and delivered in such denominations and registered in the names of such persons as are requested in such a Certificate of the District, subject to the limitations of Section 92.04(a) hereof, provided the Trustee shall not be required to deliver such new 2023D Subordinated Bonds within a period less than 60 days from the date of receipt of such a Certificate of the District. Subsequent to any transfer pursuant to clause (iii) of subsection 92.04(a) hereof, the 2023D Subordinated Bonds shall be transferred as provided in Article II of the Subordinate Master Resolution.

(c) In the case of partial redemption or an advance refunding of the 2023D Subordinated Bonds evidencing all or a portion of the principal maturing in a particular year, DTC shall make an appropriate notation on the 2023D Subordinated Bonds indicating the date and amounts of such reduction in principal. The Trustee shall incur no liability for the failure or any error by DTC in making such notation and the records of the Trustee shall be determinative of the outstanding principal amount of 2023D Subordinated Bonds.

(d) The District and the Trustee shall be entitled to treat the person in whose name any 2023D Subordinated Bond is registered as the Bondholder thereof for all purposes of the Subordinate Master Resolution and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the District; and the District and the Trustee shall have no responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with, any Beneficial Owners of the 2023D Subordinated Bonds. Neither the District nor the Trustee will have any responsibility or obligations, legal or otherwise, to the Beneficial Owners or to any other party including DTC or its successor (or substitute depository or its successor), except for the Holder of any 2023D Subordinated Bond.

(e) During any period that the Outstanding 2023D Subordinated Bonds are registered in the name of Cede & Co. or its registered assigns, the District and the Trustee (to the extent funds are provided to it by the District) shall cooperate with Cede & Co., as sole registered Bondholder, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2023D Subordinated Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made immediately available on the date they are due.

Section 92.05. Tax Covenants.

(a) The District shall at all times do and perform all acts and things permitted by law which are necessary or desirable in order to assure that interest paid on the 2023D Subordinated Bonds (or any of them) will be excluded from gross income for federal income tax purposes and shall take no action that would result in such interest not being excluded from gross income for federal income tax purposes. Without limiting the generality of the foregoing, the District agrees to comply with the provisions of the 2023 Tax Certificate. This covenant shall survive payment in full or defeasance of the 2023D Subordinated Bonds.

(b) Without limiting the generality of the foregoing, the District agrees that there shall be paid from time to time all amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Internal Revenue Code of 1986 (the "Code") and any temporary, proposed or final United States Treasury Regulations as may be applicable to the 2023D Subordinated Bonds from time to time (the "Rebate Requirement"). The District specifically covenants to pay or cause to be paid the Rebate Requirement as provided in the 2023 Tax Certificate to the United States of America from any Net Subordinate Revenues lawfully available to the District. This covenant shall survive payment in full or defeasance of the 2023D Subordinated Bonds. Capitalized terms in this Section not otherwise defined in the Subordinate Master Resolution or this Fifteenth Supplemental Resolution shall have the meanings ascribed to them in the 2023 Tax Certificate.

(c) The District shall establish, maintain and hold in trust a fund separate from any other fund established and maintained hereunder designated the Rebate Fund. The District shall cause to be deposited in the Rebate Fund the Rebate Requirement as provided in the 2023 Tax Certificate. Subject to the provisions of this Section, moneys held in the Rebate Fund are hereby pledged to secure payments to the United States government, and the District and the Bondholders shall have no rights in or claim to such moneys.

(d) In accordance with the 2023 Tax Certificate, the District shall remit part or all of the balance held in the Rebate Fund to the United States government as so directed.

(e) Notwithstanding any provision of this Section, if the District shall obtain an opinion of counsel of recognized national standing in the field of obligations the interest on which is excluded from gross income for purposes of federal income taxation to the effect that any specified action required under this Section is no longer required, or to the effect that some different action is required, to maintain the exclusion from gross income of the interest on the 2023D Subordinated Bonds under Section 103 of the Code, the District may rely conclusively on such opinion in complying with the provisions hereof, and the agreements and covenants hereunder shall be deemed to be modified to that extent without the necessity of an amendment of the Subordinate Master Resolution or this Fifteenth Supplemental Resolution or the consent at any time of the Bondholders.

Section 92.06. Rights of Credit Provider.

(a) Unless a Credit Provider Failure has occurred and is continuing, the Credit Provider shall be deemed the sole Holder of the 2023D Subordinated Bonds for the purpose of directing the Trustee with respect to the exercise of remedies and the declaration or waiver of Events of Default pursuant to Article IX of the Subordinate Resolution.

(b) Unless a Credit Provider Failure has occurred and is continuing, the Subordinate Master Resolution and this Fifteenth Supplemental Resolution shall not be amended without the written consent of the Credit Provider.

(c) Unless a Credit Provider Failure has occurred and is continuing, the District shall not appoint a successor Remarketing Agent or Trustee without the written consent of the Credit Provider.

Section 92.07. Limitations on Rights of Trustee.

(a) Proceeds of drawings on the Credit Enhancement and the Liquidity Facility and moneys on deposit in the Purchase Fund shall be used solely for the purposes set forth herein, and the Trustee shall have no lien on such proceeds or money, nor shall such proceeds or moneys be used for, the payment of the fees and/or expenses of the Trustee.

(b) The Trustee shall draw on the Credit Enhancement and the Liquidity Facility at the times and in the manner provided herein and therein and shall have no right to seek or obtain indemnification from the District, the Holders or any other party as a condition of making any such drawing.

Section 92.08. Terms of 2023D Subordinated Bonds Subject to the Subordinate Master Resolution.

(a) Except as in this Fifteenth Supplemental Resolution expressly provided, every term and condition contained in the Subordinate Master Resolution shall apply to this Fifteenth Supplemental Resolution and to the 2023D Subordinated Bonds with the same force and effect as if the same were herein set forth at length, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Fifteenth Supplemental Resolution.

(b) This Fifteenth Supplemental Resolution and all the terms and provisions herein contained shall form part of the Subordinate Master Resolution as fully and with the same effect as if all such terms and provisions had been set forth in the Subordinate Master Resolution. The Subordinate Master Resolution is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended hereby.

Section 92.09. Resolution of Trust to Remain in Effect. Save and except as supplemented by this Fifteenth Supplemental Resolution, the Subordinate Master Resolution shall remain in full force and effect.

Section 92.10. Notice to Rating Agencies. (a) The District shall provide or cause to be provided prompt notice of the following events to the Rating Agencies, if any:

(1) the expiration, termination, extension or substitution of any Credit Enhancement or Liquidity Facility relating to the 2023D Subordinated Bonds;

(2) any optional redemption (as a whole or in part), mandatory purchase or acceleration of the 2023D Subordinated Bonds;

(3) any Conversion of the 2023D Subordinated Bonds;

(4) any amendment, modification or supplement of or to the Subordinate Master Resolution or any Credit Enhancement or Liquidity Facility relating to the 2023D Subordinated Bonds (which notice shall be provided or caused to be provided at least ten days prior to the effective date thereof);

(5) any change in the party instructed to draw on any Credit Enhancement or Liquidity Facility relating to the 2023D Subordinated Bonds;

(6) any removal or resignation of the Trustee or the Remarketing Agent; or

(7) any legal defeasance of the 2023D Subordinated Bonds.

(b) The District and the Trustee shall provide or cause to be provided to the Rating Agencies any information reasonably requested by such Rating Agency to maintain its rating, if any, on the 2023D Subordinated Bonds.

Section 92.11. Continuing Disclosure. The District hereby covenants and agrees that it will comply with and carry out all of the provisions of any Continuing Disclosure Agreement executed in connection with the 2023D Subordinated Bonds. Notwithstanding any other provision of the Subordinate Master Resolution or this Fifteenth Supplemental Resolution, failure of the District to comply with any such Continuing Disclosure Agreement shall not be considered an Event of Default; however, the Trustee shall, at the written request of any Participating Underwriter (as defined in any such Continuing Disclosure Agreement) or the Holders of at least 25% aggregate principal amount of Outstanding 2023D Subordinated Bonds upon receipt of indemnity satisfactory to the Trustee or any Holder of 2023D Subordinated Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Section. For purposes of this Section, “Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2023D Subordinated Bonds (including persons holding 2023D Subordinated Bonds through nominees, depositories or other intermediaries).

Section 92.12. Designation of Credit Provider and Liquidity Provider Reimbursement Obligations as Parity Subordinated Debt; Authorization and Issuance of Revolving Notes. For the avoidance of doubt, the District hereby designates as Parity Subordinated Debt, secured by the pledge of Net Subordinated Revenues made by the District pursuant to Section 5.01 of the Subordinate Master Resolution on the same basis as the Subordinated Bonds and all other Parity Subordinated Debt as provided in the Subordinate Master Resolution, any and all obligations of the District pursuant to any Credit Enhancement, Liquidity Facility, or Reimbursement Agreement to reimburse each Credit Provider or Liquidity Provider for drawings or other advances on or pursuant to the related Credit Enhancement or Liquidity Facility, including, without limitation, any accrued interest on such drawings or advances, all as set forth in the related Credit Enhancement, Liquidity Facility, or Reimbursement Agreement (collectively, the “Reimbursement Obligations”). In order to more fully evidence the Reimbursement Obligations as Parity Subordinated Debt, the Board hereby authorizes the issuance from time to time of one or more revenue bonds pursuant to the Act in substantially the form of and with the terms stated in the form of the revolving note set forth as Exhibit B to this Fifteenth Supplemental Resolution (each a “Revolving Note”), but the delivery of such Revolving Note shall not be required to secure such Reimbursement Obligations as Parity Subordinated Debt. At the time of each delivery of a Credit Enhancement or Liquidity Facility pursuant to the terms of this Fifteenth Supplemental Resolution, the District may deliver a Revolving Note to the related Credit Provider or Liquidity Provider with a stated amount equal to the Available Amount under such Credit Enhancement or Liquidity Facility and with all blanks and brackets filled in as appropriate and with such other changes as may be necessary or appropriate to conform to the terms of such Credit Enhancement, Liquidity Facility, or Reimbursement Agreement.

Approved: May 18, 2023

INTRODUCED: DIRECTOR ROSE				
SECONDED: DIRECTOR BUI-THOMPSON				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

EXHIBIT A

FORM OF 2023D SUBORDINATED BOND

[TO BE CONFORMED TO SALES CERTIFICATE]

No. R-__ \$ _____

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE BOND
2023 SERIES D**

<u>Maturity</u>	<u>Interest Per Annum</u>	<u>Date</u>	<u>CUSIP</u>
August 15, 20__	Variable	_____, 2023	

REGISTERED OWNER: _____

PRINCIPAL AMOUNT: _____ DOLLARS

SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district duly organized and existing under and pursuant to the laws of the State of California (the “District”), for value received, hereby promises to pay (but only out of the Net Subordinated Revenues hereinafter referred to) to the registered owner named above or registered assigns, on the maturity date specified above, the principal sum specified above together with interest thereon from _____, 2023, until the principal hereof shall have been paid, at the interest rates per annum determined as set forth below, payable on each Interest Payment Date, as defined below. The principal of and premium, if any, and interest on the 2023D Subordinated Bonds, as defined below, shall be payable in lawful money of the United States of America. Interest on the 2023D Subordinated Bonds shall be paid on each Interest Payment Date, as defined below, by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode, by check mailed on the date on which due to the Holders of the 2023D Subordinated Bonds at the close of business on the Record Date for the 2023D Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2023D Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2023D Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2023D Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of \$1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2023D Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2023D Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2023D Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2023D Subordinated Bonds registered in the name of

the Securities Depository (or its nominee), interest on any such 2023D Subordinated Bond shall be payable only upon surrender of such 2023D Subordinated Bond at the office of the Paying Agent. The principal of and premium, if any, on each 2023D Subordinated Bond shall be payable on the Principal Payment Date of such 2023D Subordinated Bond upon surrender thereof at the office of the Paying Agent, subject to the terms of the Fifteenth Supplemental Resolution, as defined below.

This Bond is one of a duly authorized issue of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds (hereinafter called the “Subordinated Bonds”) designated as Subordinated Electric Revenue Bonds, 2023 Series D (the “2023D Subordinated Bonds”). The Subordinated Bonds are not limited in aggregate principal amount, except as otherwise provided in the Subordinate Resolution hereinafter mentioned, and consist or may consist of one or more series of varying denominations, dates, maturities, interest rates and other provisions, as in said Subordinate Resolution provided, all issued and to be issued pursuant to the provisions of the Revenue Bond Law of 1941 as made applicable by Article 6a of Chapter 6, Division 6, of the California Public Utilities Code and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (hereinafter called the “Act”). This 2023D Subordinated Bond is issued pursuant to Resolution No. 85-11-1 of the District, adopted November 7, 1985, providing for the issuance of the Subordinated Bonds, as amended and restated by Resolution No. 01-06-10 of the District, adopted on June 21, 2001 (as amended and restated, the “Subordinate Master Resolution”), and as supplemented and amended by resolutions to date, including by a Fifteenth Supplemental Resolution, adopted May 18, 2023, authorizing the issuance of the 2023D Subordinated Bonds (said resolution as amended, restated and supplemented and the Fifteenth Supplemental Resolution being hereinafter collectively called the “Subordinate Resolution”). Reference is hereby made to the Subordinate Resolution and the Act for a description of the terms on which the Subordinated Bonds are issued and to be issued, the provisions with regard to the nature and extent of the Revenues, as that term is defined in the Subordinate Resolution, and the rights of the registered owners of the Subordinated Bonds; and all the terms of the Subordinate Resolution and the Act are hereby incorporated herein and constitute a contract between the District and the registered owner from time to time of this 2023D Subordinated Bond, and to all the provisions thereof the registered owner of this 2023D Subordinated Bond, by its acceptance hereof, consents and agrees. Additional bonds may be issued on a parity with the Subordinated Bonds of this authorized issue, but only subject to the conditions and limitations contained in the Subordinate Resolution. Capitalized terms used, but not defined herein shall have the meaning given such terms in the Subordinate Resolution.

The Subordinated Bonds and the interest thereon, together with the Parity Subordinated Debt (as defined in the Subordinate Resolution) heretofore or hereafter issued by the District, and the interest thereon, are payable from, and are secured by a charge and lien on, the Net Subordinated Revenues derived by the District from the Electric System (as those terms are defined in the Subordinate Resolution). The District covenants and warrants that for the payment of the Subordinated Bonds, and interest thereon, there have been created and will be maintained by the District special funds into which there shall be deposited from Net Subordinated Revenues available for that purpose sums sufficient to pay the principal of, and interest on, all of the Subordinated Bonds, as such principal and interest become due, and as an irrevocable charge the District has allocated Net Subordinated Revenues to such payment, all in accordance with the Subordinate Resolution.

The Subordinated Bonds, including the 2023D Subordinated Bonds, are expressly subordinated in right of payment to the prior payment in full of all Parity Bonds, as that term is defined in Resolution No. 6649 of the District, adopted on January 7, 1971 (the “Senior Bond Resolution”), including the District’s Electric Revenue Bonds. The holder of this 2023D Subordinated Bond, by acceptance hereof, authorizes and directs the Trustee on its behalf to take such action as may be necessary or appropriate to effectuate the subordination provided in this paragraph and in the Subordinate Resolution and appoints the Trustee its attorney-in-fact for any and all such purposes.

The Subordinated Bonds are special obligations of the District, and are payable, both as to principal and interest, out of the Net Subordinated Revenues pertaining to the Electric System, and not out of any other fund or moneys of the District. No holder of this Bond shall ever have the right to compel any exercise of the taxing power of the District to pay this Bond or the interest hereon.

The term of the 2023D Subordinated Bonds will be divided into consecutive Interest Periods during each of which the 2023D Subordinated Bonds shall bear interest at a Flexible Rate or Flexible Rates, a Daily Rate, a Weekly Rate, a Direct Purchase Index Rate, a Term Rate, an Index Rate or a Fixed Rate or Fixed Rates. The 2023D Subordinated Bonds shall initially bear interest at a Term Rate for an initial Term Rate Period ending on [_____, 20__]. The Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2023D Subordinated Bonds thereafter may be changed from time to time as provided in the Subordinate Resolution. As hereinafter described, the 2023D Subordinated Bonds are subject to mandatory purchase on any Conversion Date.

Interest on the 2023D Subordinated Bonds is to be paid on: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2023D Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2023D Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day specified (a) in the Sales Certificate in connection with the initial issuance of the 2023D Subordinated Bonds or (b) in writing by the District in connection with the Conversion Date to such Term Rate Mode or Fixed Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the applicable Reimbursement Agreement or Liquidity Facility (each an “Interest Payment Date”).

The interest rate on the 2023D Subordinated Bonds shall be determined as follows:

Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and

in Section 88.04 of the Fifteenth Supplemental Resolution, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2023D Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2023D Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2023D Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2023D Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2023D Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2023D Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023D Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period.

During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. The Term Rate shall be the minimum rate which, in

the sole judgment of the Remarketing Agent, would result in a sale of such 2023D Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

Fixed Rates. The Remarketing Agent shall determine the Fixed Rate for 2023D Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2023D Subordinated Bonds will have Serial Maturity Dates in accordance with Section 88.11(b)(v) of the Fifteenth Supplemental Resolution). Except as set forth in Section 88.11(b)(v) of the Fifteenth Supplemental Resolution, the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2023D Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 88.11(b)(v) of the Fifteenth Supplemental Resolution, the Fixed Rate so established shall remain in effect until the Maturity Date of such 2023D Subordinated Bonds.

Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2023D Subordinated Bonds (other than 2023D Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2023D Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2023D Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2023D Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2023D Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2023D Subordinated Bonds.

For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but

excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2023D Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

For 2023D Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2023D Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

Direct Purchase Index Rates.

(a) During each Direct Purchase Index Rate Period, the 2023D Subordinated Bonds shall, subject to subparagraph (b) below, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2023D Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2023D Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2023D Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2023D Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 90.02(b) thereof, but subject to Section 88.04(c) and Section 88.09(b)(ii) and (iii) thereof, from and after any Taxable Date, the interest rate on 2023D Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 90.02(b) thereof, but subject to Section 88.04(c) and Section 88.09(b)(iii) thereof, from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2023D Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2023D Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2023D Subordinated Bonds exceeds the Maximum Rate for such 2023D Subordinated Bonds, then (A) such 2023D Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2023D Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2023D Subordinated Bonds as otherwise calculated pursuant to the above provisions and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2023D Subordinated Bonds as otherwise calculated pursuant to the above provisions is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2023D Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2023D Subordinated Bonds are redeemed or tendered for purchase in accordance with the Fifteenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2023D Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything in the Subordinate Resolution to the contrary, but subject to Section 88.04(c) and Section 88.09(b)(i), (ii) and (iii) thereof, during any Amortization Period, the 2023D Subordinated Bonds shall bear interest at the Bank Rate.

Index Rates. During each Index Rate Period, the 2023D Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2023D Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2023D Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2023D Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2023D Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2023D Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2023D Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2023D Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the District shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect

during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2023D Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2023D Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Optional Tenders of 2023D Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 90.06, the Beneficial Owners of 2023D Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2023D Subordinated Bonds (or portions of those 2023D Subordinated Bonds, provided that no 2023D Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode. The 2023D Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2023D Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2023D Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2023D Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2023D Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

The term “Mandatory Purchase Date” means: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such Flexible Rate Bond, (ii) with respect to 2023D Subordinated Bonds in the Term Rate Mode, the first Business Day following the last day of each Term Rate Period applicable to such 2023D Subordinated Bonds, (iii) with respect to any 2023D Subordinated Bonds, any Conversion Date applicable to such 2023D Subordinated Bond (except for any Conversion Date in respect of a conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode) or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 88.11 not failed to occur (except for any such date in respect of a proposed conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode), (iv) with respect to any 2023D Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2023D Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility supporting such 2023D Subordinated Bonds, (vi) with respect to any 2023D Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility, which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023D Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee’s receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023D Subordinated Bonds and in no event later than the Business Day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2023D Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2023D Subordinated Bonds (other than interest on 2023D Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2023D Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee’s receipt of such notice, (viii) with respect to 2023D Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee’s receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023D Subordinated Bonds, (ix) with respect to 2023D Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2023D Subordinated Bonds, and (x) with respect to 2023D Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Notwithstanding the above paragraphs and anything to the contrary in the Fifteenth Supplemental Resolution, in the event the 2023D Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the

Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2023D Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2023D Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), in which case the 2023D Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2023D Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2023D Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2023D Subordinated Bonds may be subject to redemption or purchase at the sole option of the District at any time without notice as and to the extent provided in the Continuing Covenant Agreement.

Optional Redemption of Flexible Rate Bonds. 2023D Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2023D Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Optional Redemption of 2023D Subordinated Bonds in the Daily Mode or the Weekly Mode. 2023D Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023D Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Optional Redemption of 2023D Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

2023D Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2023D Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2023D Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2023D Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

2023D Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2023D Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2023D Subordinated Bonds so changed to a

Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2023D Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Optional and Mandatory Redemption of 2023D Subordinated Bonds in the Direct Purchase Index Mode.

Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2023D Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023D Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

2023D Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Mandatory Sinking Fund Account Redemption of 2023D Subordinated Bonds. The 2023D Subordinated Bonds [maturing on August 15, 20[___],] shall be subject to redemption prior to maturity from mandatory sinking fund account payments for such 2023D Subordinated Bonds on August 15 of each year on and after August 15, 20__, at a Redemption Price equal to the principal amount of such 2023D Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The following shall be the mandatory sinking fund account payments for the 2023D Subordinated Bonds [maturing on August 15, 20[___]]. Such mandatory sinking fund account payments shall be due on August 15 of the years set forth in the following table in the respective amounts set forth opposite such years in said table:

Year	Amount	Year	Amount
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* Payment at Maturity

Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2023D Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2023D Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023D Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2023D Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2023D Subordinated Bonds to be redeemed, and shall also state that the interest on the 2023D Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023D Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2023D Subordinated Bonds to be redeemed. Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption. Notwithstanding the foregoing, notice of redemption shall not be required for 2023D Subordinated Bonds redeemed on a Mandatory Purchase Date.

This 2023D Subordinated Bond is transferable by the registered owner hereof, in person or by the attorney of such owner duly authorized in writing, at the principal office of the Trustee but only in the manner, subject to the limitations and upon payment of the charges provided in the Subordinate Resolution, and upon surrender and cancellation of this 2023D Subordinated Bond. Upon such transfer a new fully registered Bond or Subordinated Bonds without coupons, of authorized denomination or denominations, for the same aggregate principal amount and maturity will be issued to the transferee in exchange herefor.

The District and the Trustee may deem and treat the registered owner hereof as the absolute owner hereof for all purposes, and the District and the Trustee shall not be affected by any notice to the contrary.

To the extent this 2023D Subordinated Bond constitutes a Liquidity Facility Bond, the terms and conditions of the Fifteenth Supplemental Resolution with respect to Liquidity Facility Bonds shall control this 2023D Subordinated Bond.

The rights and obligations of the District and of the holders and registered owners of the Subordinated Bonds may be modified or amended at any time in the manner, to the extent, and upon the terms provided in the Subordinate Resolution, provided that no such modification or amendment shall (i) extend the fixed maturity of any Subordinated Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce the amount of any premium payable upon the redemption thereof, without the consent of the holder of each Subordinated Bond so affected, or (ii) reduce the percentage of Subordinated Bonds required for the affirmative vote or written consent to an amendment or modification, without the consent of the holders of all the Subordinated Bonds then outstanding, or (iii) without its written consent thereto, modify any of the rights or obligations of the Trustee.

It is hereby certified and recited that any and all acts, conditions and things required to exist, to happen and to be performed, precedent to and in the incurring of the indebtedness evidenced by this 2023D Subordinated Bond, and in the issuing of this 2023D Subordinated Bond, do exist, have happened and have been performed in due time, form and manner, as required by the Constitution and statutes of the State of California, and that this 2023D Subordinated Bond, together with all other indebtedness of the District pertaining to the Electric System, is within every debt and other limit prescribed by the Constitution and the statutes of the State of California, and is not in excess of the amount of Subordinated Bonds permitted to be issued under the Subordinate Resolution.

This 2023D Subordinated Bond shall not be entitled to any benefit under the Subordinate Resolution, or become valid or obligatory for any purpose, until the certificate of authentication hereon endorsed shall have been signed by the Trustee. To the extent of any conflict or inconsistency between any provisions contained in this 2023D Subordinated Bond and the Subordinate Resolution, the provisions of the Subordinate Resolution shall control.

IN WITNESS WHEREOF, SACRAMENTO MUNICIPAL UTILITY DISTRICT has caused this 2023D Subordinated Bond to be executed in its name and on its behalf by the facsimile signature of its President of its Board of Directors and by the facsimile signature of its Treasurer and countersigned by the facsimile signature of its Secretary, and the seal of the District to be reproduced hereon, by facsimile and this 2023D Subordinated Bond to be dated as of the date first written above.

SACRAMENTO MUNICIPAL UTILITY
DISTRICT

By _____
President of the Board of Directors

By _____
Treasurer of the District

(SEAL)

Countersigned:

Secretary of the District

CERTIFICATE OF AUTHENTICATION AND REGISTRATION

This is one of the Subordinated Bonds described in the within-mentioned Subordinate Resolution and registered on the date set forth below.

Dated: _____, 2023

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
as Trustee

By _____
Authorized Officer

ASSIGNMENT

For value received _____ hereby sell, assign and transfer unto _____ whose taxpayer identification number is _____ the within-mentioned Bond and hereby irrevocably constitute and appoint _____ attorney, to transfer the same on the books of the District at the office of the Trustee, with full power of substitution in the premises.

NOTE: The signature to this Assignment must correspond with the name on the face of the within Registered Bond in every particular, without alteration or enlargement or any change whatsoever.

Dated:

Signature Guaranteed by:

NOTE: Signature must be guaranteed by an eligible guarantor institution

EXHIBIT B

FORM OF REVOLVING NOTE

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE BONDS
2023 SERIES D**

[Delivery Date] \$ _____

The Sacramento Municipal Utility District (the “District”), for value received, hereby promises to pay to the order of [Bank] (the “Bank”), pursuant to that certain _____ dated as of _____ (the “Agreement”), between the District and the Bank, at the office of the Bank at _____, the aggregate unpaid principal amount of all Reimbursement Obligations (as defined in the Agreement) pursuant to the Agreement on the dates and in the amounts provided for in the Agreement.

The District promises to pay interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. All payments of principal and interest shall be made in any coin or currency of the United States of America which at the time of payment is legal tender for public and private debts in immediately available funds. All capitalized terms used herein and not otherwise defined herein shall have the meanings specified in the Agreement.

This Revolving Note is a Revolving Note as referred to in Section 92.12 of Resolution No. 01-06-10 of the District adopted June 21, 2001, amending and restating Resolution No. 85-11-1 of the District adopted November 7, 1985, as amended and supplemented, including as supplemented by Resolution No. _____ of the District adopted May 18, 2023 (the “Fifteenth Supplemental Resolution”) (collectively, the “Subordinate Master Resolution”). This Revolving Note evidences the Reimbursement Obligations owed to the Bank by the District pursuant to the Agreement which have been designated by the District as, and constitute, Parity Subordinated Debt under and as defined in the Subordinate Master Resolution and, as such Parity Subordinated Debt, is entitled to the benefits afforded Parity Subordinated Debt and the holders thereof pursuant to the Subordinate Master Resolution and is secured by a lien on the Net Subordinated Revenues as more fully set forth in and subject to the terms of the Subordinate Master Resolution. As provided in the Agreement, the Reimbursement Obligations and this Revolving Note are subject to prepayment, in whole or in part, in accordance with the terms of the Agreement.

The Bank agrees, by acceptance of this Revolving Note, that it will make a notation on the schedule attached hereto of all Reimbursement Obligations evidenced hereby and all principal payments and prepayments made hereunder and of the date to which interest hereon has been paid, all as provided in the Agreement; *provided, however*, that the failure to make any such notation or any error in such notation shall not limit or otherwise affect the obligation of the District hereunder with respect to payments of principal of and interest on this Revolving Note.

This Revolving Note is authorized by the District to be issued to provide for the payment of the principal of and interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. This Revolving Note is issued under and pursuant to and in full compliance with the Subordinate Master Resolution and the Fifteenth Supplemental Resolution.

It is hereby certified that all conditions, acts and things essential to the validity of this Revolving Note exist, have happened and have been done and that every requirement of law affecting the issuance hereof has been duly complied with.

IN WITNESS WHEREOF, SMUD, has caused this Revolving Note to be executed by an authorized officer of SMUD and this Revolving Note to be dated as of date set forth above.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
Name: _____
Title: _____

SCHEDULE FOR REVOLVING NOTE
DATED _____
BY SACRAMENTO MUNICIPAL UTILITY DISTRICT
PAYABLE TO [BANK]

<u>Date</u>	<u>Amount of Drawing or Advance Made</u>	<u>Amount of Principal Paid</u>	<u>Date to Which Interest Paid</u>	<u>Due Date</u>	<u>Notation Made by</u>
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SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. 23-05-09

SIXTEENTH SUPPLEMENTAL RESOLUTION

AUTHORIZING THE ISSUANCE OF

SUBORDINATED ELECTRIC REVENUE BONDS,
2023 SERIES E

Adopted: May 18, 2023

(Supplemental to Resolution No. 85-11-1 adopted November 7, 1985
as amended and restated by Resolution No. 01-06-10 adopted June 21, 2001)

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RESOLUTION NO. 23-05-09

Sixteenth Supplemental Resolution
(Supplemental to Resolution No. 85-11-1 Adopted November 7, 1985,
as amended and restated by Resolution No. 01-06-10 Adopted June 21, 2001)

Subordinated Electric Revenue Bonds,
2023 Series E

WHEREAS, the Board of Directors (the “Board”) of the Sacramento Municipal Utility District (the “District”), on November 7, 1985, adopted its Resolution No. 85-11-1 which was amended and restated by Resolution No. 01-06-10, adopted on June 21, 2001, providing for the issuance of the District’s Subordinated Electric Revenue Bonds (as supplemented and amended, herein called the “Subordinate Master Resolution”);

WHEREAS, the Subordinate Master Resolution provides that the District may issue bonds from time to time as the issuance thereof is authorized by the Board by a supplemental resolution;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Subordinate Master Resolution and the Act (as defined in the Subordinate Master Resolution); and

WHEREAS, the District has determined to issue its Subordinated Electric Revenue Bonds, 2023 Series E (the “2023E Subordinated Bonds”), in the aggregate principal amount determined as set forth in Section 94.02 to (i) finance and refinance improvements and additions to the District’s Electric System, including through the payment of all or a portion of the District’s outstanding commercial paper notes (to the extent set forth in the Sales Certificate), (ii) refund certain series of the District’s Electric Revenue Bonds (to the extent set forth, and to be identified, in the Sales Certificate) (the “Refunded Bonds”), and (iii) pay costs of issuance (to the extent set forth in the Sales Certificate);

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Sacramento Municipal Utility District, as follows:

ARTICLE XCIII

AUTHORITY AND DEFINITIONS

Section 93.01. Supplemental Resolution. This Sixteenth Supplemental Resolution is supplemental to the Subordinate Master Resolution.

Section 93.02. Definitions; Prevailing Time.

(1) Except as provided by this Sixteenth Supplemental Resolution, all terms which are defined in Section 1.03 of the Subordinate Master Resolution shall have the same meanings in this Sixteenth Supplemental Resolution as such terms are given in said Section 1.03. Unless otherwise provided herein, all references to a particular time are to New York City time.

In the event of a conflict between the meanings given in said Section 1.03 and the meanings given in this Section, the meanings given in this Section shall prevail.

(2) In this Sixteenth Supplemental Resolution:

Alternate Credit Enhancement shall mean a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof as a replacement or substitute for any Credit Enhancement then in effect and providing for or supporting the payment of the principal of and interest on the 2023E Subordinated Bonds.

Alternate Liquidity Facility shall mean a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof as a replacement or substitute for any Liquidity Facility then in effect and providing for the payment of the Purchase Price of Tendered Bonds.

Alternate Rate shall mean, on any Rate Determination Date, for any Interest Rate Mode other than a Direct Purchase Index Mode, an Index Mode or a Term Rate Mode, a rate per annum equal to 110% of (a) the SIFMA Municipal Swap Index of Municipal Market Data most recently available as of the date of determination, or (b) if such index is no longer available, or if the SIFMA Municipal Swap Index is no longer published, the S&P Municipal Bond 7 Day High Grade Rate Index, or if neither the SIFMA Municipal Swap Index nor the S&P Municipal Bond 7 Day High Grade Rate Index is published, the index determined to equal the prevailing rate determined by the Remarketing Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Remarketing Agent to be comparable under the circumstances to the criteria used by the Securities Industry and Financial Markets Association to determine the SIFMA Municipal Swap Index just prior to when the Securities and Financial Markets Association stopped publishing the SIFMA Municipal Swap Index. The Trustee shall make the determinations required by this definition, upon notification from the District, if there is no Remarketing Agent, if the Remarketing Agent fails to make any such determination or if the Remarketing Agent has suspended its remarketing efforts in accordance with the Remarketing Agreement.

Amortization End Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Amortization Interest Payment Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Amortization Period shall mean, in the event the 2023E Subordinated Bonds are not purchased or remarketed on any Bank Purchase Date and the other conditions set forth in Section 96.02(b) are satisfied, the period commencing on the Bank Purchase Date and ending on the Amortization End Date.

Amortization Principal Payment Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Applicable Factor shall mean, upon any Conversion to a Direct Purchase Index Rate Period, the percentage of the Direct Purchase Index designated in writing by the District as the Applicable Factor for such Direct Purchase Index Rate Period pursuant to Section 94.09(a); provided, however, that the Applicable Factor shall never be less than 65% unless a Favorable Opinion of Bond Counsel is delivered in connection with the Conversion to such Direct Purchase Index Rate Period.

Applicable Spread shall mean, with respect to any Direct Purchase Index Rate Period, the number of basis points determined by the Market Agent on or before the first day of such Direct Purchase Index Rate Period and designated by the District in accordance with Section 94.09(a) (which may include a schedule for the Applicable Spread based upon the ratings assigned to any indebtedness of the District) that, when added to the product of the Direct Purchase Index multiplied by the Applicable Factor, would equal the minimum interest rate per annum that would enable the 2023E Subordinated Bonds to be sold on such date at a price equal to the principal amount thereof (without regard to accrued interest, if any, thereon).

Authorized Denominations shall mean (i) with respect to 2023E Subordinated Bonds in a Daily Mode or Weekly Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof; (ii) with respect to 2023E Subordinated Bonds in a Flexible Mode, \$100,000 and any integral multiple of \$1,000 in excess thereof; (iii) with respect to 2023E Subordinated Bonds in a Direct Purchase Index Mode or Index Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof; and (iv) with respect to 2023E Subordinated Bonds in a Term Rate Mode or a Fixed Rate Mode, \$5,000 and any integral multiple thereof.

Available Amount shall mean the amount available under a Credit Enhancement or Liquidity Facility, as applicable, to pay the principal of and interest on the 2023E Subordinated Bonds or the Purchase Price of the 2023E Subordinated Bonds, as applicable.

Available Moneys shall mean (a) if a Credit Enhancement is in effect, (i) moneys drawn under the Credit Enhancement which at all times since their receipt by the Trustee were held in a separate segregated account or accounts or subaccount or subaccounts in which no moneys (other than those drawn under the Credit Enhancement) were at any time held, (ii) moneys which have been paid to the Trustee and have been on deposit with the Trustee for at least 124 days (or, if paid to the Trustee by an “affiliate,” as defined in Bankruptcy Code §101(2), of the District, 366 days) during and prior to which no Event of Bankruptcy shall have occurred, (iii) any other moneys, if, in the opinion of nationally recognized counsel experienced in bankruptcy matters (which opinion shall be acceptable to each Rating Agency then rating the 2023E Subordinated Bonds), the application of such moneys will not constitute a voidable preference in the event of the occurrence of an Event of Bankruptcy, and (iv) investment earnings on any of the moneys described in clauses (i), (ii) and (iii) of this definition; and (b) if a Credit Enhancement is not in effect, “Available Moneys” means any moneys deposited with the Trustee.

Bank shall mean, while the 2023E Subordinated Bonds are in a Direct Purchase Index Mode, the Holder of the 2023E Subordinated Bonds, provided that there is a single Holder of all of the 2023E Subordinated Bonds and provided further that the 2023E Subordinated Bonds are not then held under the book-entry system of a Securities Depository. If there is more than

one Holder of the 2023E Subordinated Bonds while the 2023E Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Holders owning a majority of the aggregate principal amount of the 2023E Subordinated Bonds then Outstanding. If the 2023E Subordinated Bonds are held under the book-entry system of a Securities Depository during any Direct Purchase Index Mode, “Bank” means the Beneficial Owner of the 2023E Subordinated Bonds, provided that there is a single Beneficial Owner of all of the 2023E Subordinated Bonds. If there is more than one Beneficial Owner of the 2023E Subordinated Bonds while the 2023E Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Beneficial Owners who are the beneficial owners of a majority of the aggregate principal amount of the 2023E Subordinated Bonds then Outstanding.

Bank Purchase Date shall mean, during any Direct Purchase Index Rate Period, (i) the date designated by the District pursuant to Section 94.11(a) and (ii) the date which is five Business Days after the date on which the Trustee receives written notice from the Bank under a Continuing Covenant Agreement which (x) advises the Trustee of the occurrence and continuance of an “Event of Default” under and as defined in such Continuing Covenant Agreement and (y) directs the Trustee to cause a mandatory tender for purchase of the 2023E Subordinated Bonds by reason of such “Event of Default.”

Bank Rate shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Bankruptcy Code means Title 11 of the United States Code, as amended, and any successor statute.

Beneficial Owner shall mean, so long as the 2023E Subordinated Bonds are held in the Book-Entry System, any Person who acquires a beneficial ownership interest in a 2023E Subordinated Bond held by the Securities Depository. If at any time the 2023E Subordinated Bonds are not held in the Book-Entry System, Beneficial Owner shall mean Holder for purposes of the Subordinate Master Resolution.

Bond Counsel shall mean any firm of nationally recognized municipal bond attorneys selected by the District and experienced in the issuance of municipal bonds and matters relating to the exclusion of the interest thereon from gross income for federal income tax purposes.

Book-Entry System shall mean the system maintained by the Securities Depository.

Business Day shall mean any day other than (i) a Saturday or Sunday or (ii) a day on which banks located in (a) the State of California or the State of New York, (b) the city or cities in which the principal office of the Trustee, the Paying Agent, the Remarketing Agent, if any, the Bank, if any, or the Calculation Agent, if any, are located, or (c) the city or cities in which the office of the Credit Provider or Liquidity Provider at which it will pay draws or advances is located, are required or authorized to remain closed, (iii) a day on which The New York Stock Exchange or Federal Reserve Bank is closed or (iv) a day on which the principal offices of the Credit Provider or Liquidity Provider are closed.

Calculation Agent shall mean, (i) during any Direct Purchase Index Rate Period, the Bank or any other party appointed by the District with the consent of the Bank so long as the Bank owns a majority in aggregate principal amount of the 2023E Subordinated Bonds and (ii) during any Index Rate Period, the Trustee or any other party appointed by the District to act as calculation agent for the 2023E Subordinated Bonds.

Call Protection Date shall mean (i) with respect to the initial issuance of the 2023E Subordinated Bonds, if applicable, the date specified in the Sales Certificate as the Call Protection Date and (ii) with respect to any conversion to a Term Rate Period or Index Rate Period, the date specified by the District in writing as the Call Protection Date for such Term Rate Period or Index Rate Period on or before the first day of such Term Rate Period or Index Rate Period.

Code shall mean the Internal Revenue Code of 1986, as amended.

Continuing Covenant Agreement shall mean, during any Direct Purchase Index Rate Period, any agreement between the District and the Bank which may be designated as the Continuing Covenant Agreement.

Conversion Date shall mean, with respect to the 2023E Subordinated Bonds in a particular Interest Rate Mode, the day on which another Interest Rate Mode for the 2023E Subordinated Bonds begins, with respect to the 2023E Subordinated Bonds in a Term Rate Mode, the day on which a new Term Rate Period begins, with respect to 2023E Subordinated Bonds in a Direct Purchase Index Mode, the day on which a new Direct Purchase Index Rate Period begins, and with respect to 2023E Subordinated Bonds in an Index Mode, the day on which a new Index Rate Period begins.

Conversion Notice shall mean the notice from the District to the other Notice Parties pursuant to Section 94.11(a)(i).

Credit Enhancement shall mean, with respect to the 2023E Subordinated Bonds, a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof and then in effect and providing for or supporting the payment of the principal of and interest on the 2023E Subordinated Bonds and, upon replacement of any such Credit Enhancement with an Alternate Credit Enhancement, the Alternate Credit Enhancement then in effect.

Credit Provider shall mean, with respect to the 2023E Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Credit Enhancement, if any, then in effect for the 2023E Subordinated Bonds.

Credit Provider Failure or Liquidity Provider Failure shall mean a failure of a Credit Provider or Liquidity Provider, as applicable, to pay a properly presented and strictly conforming draw or request for advance under a Credit Enhancement or Liquidity Facility, as applicable, or the filing or commencement of any bankruptcy or insolvency proceedings by or against a Credit Provider or Liquidity Provider, as applicable, or a Credit Provider or Liquidity Provider, as applicable, shall declare a moratorium on the payment of its unsecured debt obligations or shall repudiate a Credit Enhancement or Liquidity Facility, as applicable.

Current Mode shall have the meaning specified in Section 94.11(a).

Daily Mode shall mean the Interest Rate Mode during which the 2023E Subordinated Bonds bear interest at the Daily Rate.

Daily Rate shall mean the per annum interest rate on any 2023E Subordinated Bond in the Daily Mode determined pursuant to Section 94.06(a).

Daily Rate Period shall mean the period during which a 2023E Subordinated Bond in the Daily Mode shall bear a Daily Rate, which shall be from the Business Day upon which a Daily Rate is set to but not including the next succeeding Business Day.

Default Rate shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Delayed Remarketing Period shall have the meaning specified in Section 96.10(b) hereof.

Determination of Taxability shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Direct Purchase Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Market Agent.

Direct Purchase Index Mode shall mean the Interest Rate Mode during which the 2023E Subordinated Bonds bear interest at a Direct Purchase Index Rate.

Direct Purchase Index Rate shall mean the per annum interest rate on any 2023E Subordinated Bond in the Direct Purchase Index Mode determined in accordance with Section 94.09, being the Direct Purchase Index Rate, the Taxable Rate, the Default Rate or the Bank Rate, as applicable.

Direct Purchase Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

Direct Purchase Index Rate Effective Period shall mean, during any Direct Purchase Index Rate Period, the period from and including the first day of such Direct Purchase Index Rate Period to but excluding the next succeeding Direct Purchase Index Rate Reset Date and, thereafter, means each Direct Purchase Index Rate Reset Date to but excluding the next succeeding Direct Purchase Index Rate Reset Date.

Direct Purchase Index Rate Period shall mean the period from (and including) the date on which the 2023E Subordinated Bonds begin to bear interest in the Direct Purchase Index Mode to (but excluding) the earliest to occur of (i) the immediately succeeding Bank Purchase Date, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of

the 2023E Subordinated Bonds have been redeemed or defeased in full and (iv) the Maturity Date.

Direct Purchase Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

District Purchase Account shall mean the account by that name in the Purchase Fund created in Section 96.09.

Electronic Means shall mean telecopy, facsimile transmission, e-mail transmission or other similar electronic means of communication providing evidence of transmission, including a telephonic communication confirmed by any other method set forth in this definition.

Eligible Account shall mean an account that is either (a) maintained with a federal or state-chartered depository institution or trust company that has a Standard & Poor's short-term debt rating of at least 'A-2' (or, if no short-term debt rating, a long-term debt rating of 'BBB+'); or (b) maintained with the corporate trust department of a federal depository institution or state-chartered depository institution subject to regulations regarding fiduciary funds on deposit similar to Title 12 of the U.S. Code of Federal Regulation Section 9.10(b), which, in either case, has corporate trust powers and is acting in its fiduciary capacity. In the event that a fund or account required to be an "Eligible Account" no longer complies with the requirements listed above, the Trustee shall promptly (and, in any case, within not more than 30 calendar days) move such fund or account to another financial institution such that the Eligible Account requirements stated above will again be satisfied.

Event of Bankruptcy shall mean any of the following events:

(i) the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2023E Subordinated Bonds, or an "affiliate" of the District as defined in Bankruptcy Code § 101(2)) shall (a) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator or the like of the District (or such other Person) or of all or any substantial part of their respective property, (b) commence a voluntary case under the Bankruptcy Code, or (c) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts; or

(ii) a proceeding or case shall be commenced, without the application or consent of the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2023E Subordinated Bonds, or an "affiliate" of the District as defined in Bankruptcy Code § 101(2)) in any court of competent jurisdiction, seeking (a) the liquidation, reorganization, dissolution, winding-up, or composition or adjustment of debts, of the District (or any such other Person), (b) the appointment of a trustee, receiver, custodian, liquidator or the like of the District (or any such other Person) or of all or any substantial part of their respective property, or (c) similar relief in respect of the District (or any such other Person) under any law

relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts.

Event of Taxability shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Expiration Date shall mean the stated expiration date of a Credit Enhancement or a Liquidity Facility, as it may be extended from time to time as provided in the Credit Enhancement or the Liquidity Facility, or any earlier date on which a Credit Enhancement or a Liquidity Facility shall terminate at the direction of the District.

Favorable Opinion of Bond Counsel shall mean, with respect to any action the occurrence of which requires such an opinion, an Opinion of Counsel, which shall be a Bond Counsel, to the effect that such action is permitted under the Subordinate Master Resolution and will not, in and of itself, cause interest on the 2023E Subordinated Bonds to be included in gross income for purposes of federal income taxation.

Fitch shall mean Fitch, Inc., and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “Fitch” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

Fixed Rate shall mean the per annum interest rate on any 2023E Subordinated Bond in the Fixed Rate Mode determined pursuant to Section 94.07(b).

Fixed Rate Bond shall mean a 2023E Subordinated Bond in the Fixed Rate Mode.

Fixed Rate Mode shall mean the Interest Rate Mode during which the 2023E Subordinated Bonds bear interest at the Fixed Rate.

Fixed Rate Period shall mean the period from the Conversion Date upon which the 2023E Subordinated Bonds were converted to the Fixed Rate Mode to but not including the Maturity Date for the 2023E Subordinated Bonds.

Flexible Mode shall mean the Interest Rate Mode during which the 2023E Subordinated Bonds bear interest at Flexible Rates.

Flexible Rate shall mean the per annum interest rate on a Flexible Rate Bond determined for such Flexible Rate Bond pursuant to Section 94.05. The Flexible Rate Bonds may bear interest at different Flexible Rates.

Flexible Rate Bond shall mean a 2023E Subordinated Bond in the Flexible Mode.

Flexible Rate Period shall mean the period of from one to 270 calendar days (which period must end on either a day which immediately precedes a Business Day or the day

immediately preceding the Maturity Date) during which a Flexible Rate Bond shall bear interest at a Flexible Rate, as established by the Remarketing Agent pursuant to Section 94.05. The Flexible Rate Bonds may be in different Flexible Rate Periods.

Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Remarketing Agent.

Index Mode shall mean the Interest Rate Mode during which the 2023E Subordinated Bonds bear interest at an Index Rate.

Index Rate shall mean the per annum interest rate on any 2023E Subordinated Bond in the Index Mode determined in accordance with Section 94.10.

Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Rate Effective Period shall mean, during any Index Rate Period, the period from and including the first day of such Index Rate Period through and including the day immediately preceding the next succeeding Index Rate Reset Date and, thereafter, means each Index Rate Reset Date through and including the day immediately preceding the next succeeding Index Rate Reset Date.

Index Rate Period shall mean the period from (and including) the date on which the 2023E Subordinated Bonds begin to bear interest in the Index Mode to (but excluding) the earliest to occur of (i) the Business Day immediately succeeding the last day thereof, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of the 2023E Subordinated Bonds have been redeemed or defeased in full and (iv) the final Maturity Date.

Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Percentage shall mean, upon any conversion to an Index Rate Period, the percentage of the Index determined by the Remarketing Agent in accordance with Section 94.10; provided, however, that the Index Percentage shall never be less than 65% unless a Favorable Opinion of Bond Counsel is delivered on or before the determination of the Index Percentage by the Remarketing Agent.

Index Spread shall mean, upon any conversion to an Index Rate Period, the fixed per annum rate determined by the Remarketing Agent in accordance with Section 94.10.

Interest Accrual Period shall mean the period during which a 2023E Subordinated Bond accrues interest payable on the next Interest Payment Date applicable thereto. Each Interest Accrual Period for 2023E Subordinated Bonds shall be the period commencing on (and including) the last Interest Payment Date to which interest has been paid

(or, if no interest has been paid in such Interest Rate Mode, commencing on (and including) the date of original authentication and delivery of the 2023E Subordinated Bonds, or the Conversion Date, as the case may be) to (and excluding) the Interest Payment Date on which interest is to be paid. If, at the time of authentication of any 2023E Subordinated Bond, interest is in default or overdue on the 2023E Subordinated Bonds, such 2023E Subordinated Bond shall bear interest from the date to which interest has previously been paid in full or made available for payment in full on Outstanding 2023E Subordinated Bonds.

Interest Payment Date shall mean each date on which interest is to be paid and is: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2023E Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2023E Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day specified (a) in the Sales Certificate in connection with the initial issuance of the 2023E Subordinated Bonds or (b) in writing by the District in connection with the Conversion Date to such Term Rate Mode or Fixed Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the applicable Reimbursement Agreement or Liquidity Facility.

Interest Period shall mean, for 2023E Subordinated Bonds in a particular Interest Rate Mode, the period of time that such 2023E Subordinated Bonds bear interest at the rate (per annum) which becomes effective at the beginning of such period, and shall include a Flexible Rate Period, a Daily Rate Period, a Weekly Rate Period, a Direct Purchase Index Rate Effective Period, an Index Rate Effective Period, a Term Rate Period and a Fixed Rate Period.

Interest Rate Mode shall mean, as the context may require, the Flexible Mode, the Daily Mode, the Weekly Mode, the Direct Purchase Index Mode, the Index Mode, the Term Rate Mode or the Fixed Rate Mode.

Liquidity Facility shall mean, with respect to the 2023E Subordinated Bonds, a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof and then in effect and providing for the payment of the Purchase Price of Tendered Bonds and upon replacement of such Liquidity Facility with an Alternate Liquidity Facility, the Alternate Liquidity Facility then in effect.

Liquidity Facility Purchase Account shall mean the account by that name in the Purchase Fund created by Section 96.09.

Liquidity Provider shall mean, with respect to the 2023E Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Liquidity Facility, if any, then in effect for the 2023E Subordinated Bonds.

Liquidity Provider Bonds shall mean any 2023E Subordinated Bonds purchased by the Liquidity Provider with funds drawn on or advanced under the Liquidity Facility or Credit Enhancement, as applicable.

Long-Term Mode shall mean a Term Rate Mode or a Fixed Rate Mode.

Mandatory Purchase Date shall mean: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such Flexible Rate Bond, (ii) with respect to 2023E Subordinated Bonds in the Term Rate Mode, the first Business Day following the last day of each Term Rate Period applicable to such 2023E Subordinated Bonds, (iii) with respect to any 2023E Subordinated Bonds, any Conversion Date applicable to such 2023E Subordinated Bond (except, unless otherwise specified in writing by the District in connection with a conversion of the Interest Rate Mode to the Daily Mode or the Weekly Mode, any Conversion Date in respect of a conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode) or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 94.11 not failed to occur (except, unless otherwise specified in writing by the District in connection with a conversion of the Interest Rate Mode to the Daily Mode or the Weekly Mode, any such date in respect of a proposed conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode), (iv) with respect to any 2023E Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2023E Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility supporting such 2023E Subordinated Bonds, (vi) with respect to any 2023E Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility, which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023E Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee's receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023E Subordinated Bonds and in no event later than the Business Day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2023E Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2023E Subordinated Bonds (other than interest on 2023E Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2023E Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee's receipt of such notice, (viii) with respect to 2023E Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee's receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023E Subordinated Bonds, (ix) with respect to 2023E Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2023E Subordinated Bonds, and (x) with respect to 2023E Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Market Agent shall mean the Person appointed by the District to serve as market agent in connection with a conversion to any Direct Purchase Index Rate Period.

Maturity Date shall mean the maturity date or maturity dates of the 2023E Subordinated Bonds set forth in the Sales Certificate, or, if established pursuant to Section 94.11(b)(v) upon a change to the Fixed Rate Mode, the Serial Maturity Dates.

Maximum Rate shall mean (i) with respect to Liquidity Provider Bonds and 2023E Subordinated Bonds in the Direct Purchase Index Mode, a rate of interest per annum not exceeding the maximum non-usurious lawful rate of interest permitted by applicable laws and (ii) with respect to all other 2023E Subordinated Bonds, a rate of interest of twelve percent (12%) per annum unless a lesser rate of interest is specified as the Maximum Rate in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period.

Moody's shall mean Moody's Investors Service and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

New Mode shall have the meaning specified in Section 94.11(a).

Notice Parties shall mean the Trustee, the Remarketing Agent, if any, the Paying Agent, the Credit Provider, if any, the Liquidity Provider, if any, the Bank, if any, the Market Agent, if any, and the Calculation Agent, if any.

Opinion of Counsel shall mean a written legal opinion from a firm of attorneys experienced in the matters to be covered in the opinion.

Outstanding, when used with reference to 2023E Subordinated Bonds, shall mean, as of any date, 2023E Subordinated Bonds theretofore or thereupon being authenticated and delivered under this Sixteenth Supplemental Resolution except:

(i) 2023E Subordinated Bonds cancelled by the Trustee, or delivered to the Trustee for cancellation, at or prior to such date;

(ii) 2023E Subordinated Bonds paid or deemed paid pursuant to Section 10.01 of the Subordinate Master Resolution; and

(iii) 2023E Subordinated Bonds in lieu of or in substitution for which other 2023E Subordinated Bonds shall have been authenticated and delivered pursuant to this Sixteenth Supplemental Resolution.

Person shall mean an individual, a corporation, a partnership, an association, a joint venture, a trust, an unincorporated organization or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

Principal Payment Date shall mean any date upon which the principal amount of 2023E Subordinated Bonds is due under the Subordinate Master Resolution, including any Maturity Date, any Serial Maturity Date, any Redemption Date, or the date the maturity of any 2023E Subordinated Bond is accelerated pursuant to the terms of the Subordinate Master Resolution.

Purchase Date shall mean (i) for a 2023E Subordinated Bond in the Daily Mode or the Weekly Mode, any Business Day selected by the Beneficial Owner of said 2023E Subordinated Bond pursuant to the provisions of Section 96.01, and (ii) any Mandatory Purchase Date.

Purchase Fund shall mean the fund by that name created in Section 96.09.

Purchase Price shall mean an amount equal to the principal amount of any 2023E Subordinated Bonds purchased on any Purchase Date, plus accrued interest to but excluding the Purchase Date; provided, however, that (i) if the Purchase Date for any 2023E Subordinated Bond to be purchased is an Interest Payment Date for such 2023E Subordinated Bond, the Purchase Price thereof shall be the principal amount thereof, and interest on such 2023E Subordinated Bond shall be paid to the Holder of such 2023E Subordinated Bond pursuant to the Subordinate Master Resolution and this Sixteenth Supplemental Resolution and (ii) in the case of a purchase on a Conversion Date or proposed Conversion Date which is preceded by a Term Rate Period or an Index Rate Period and which occurs prior to the day originally established as the last day of such preceding Term Rate Period or Index Rate Period, the Purchase Price of any 2023E Subordinated Bond to be purchased on such Conversion Date shall be the Redemption Price which would have been applicable to such 2023E Subordinated Bond if the preceding Term Rate Period or Index Rate Period had continued to the day originally established as its last day, plus accrued interest, if any.

Rate Determination Date shall mean any date on which the interest rate on 2023E Subordinated Bonds shall be determined, which, (i) in the case of the Flexible Mode, shall be the first day of an Interest Period; (ii) in the case of the Daily Mode, shall be each Business Day commencing with the first day (which must be a Business Day) the 2023E Subordinated Bonds become subject to the Daily Mode; (iii) in the case of the Weekly Mode, shall be (A) each Wednesday or, if Wednesday is not a Business Day, then the Business Day next succeeding such Wednesday, and (B) not later than the Business Day preceding a Conversion Date, a Substitution Date or a Mandatory Purchase Date specified in clause (viii) of the definition of Mandatory Purchase Date; (iv) in the case of the Term Rate Mode, shall be a Business Day no later than the Business Day next preceding the first day of an Interest Period, as determined by the Remarketing Agent; (v) in the case of the Direct Purchase Index Mode, each Direct Purchase Index Rate Determination Date; (vi) in the case of the Index Mode, each Index Rate Determination Date, and (vii) in the case of the Fixed Rate Mode, shall be a date determined by the Remarketing Agent which shall be at least one Business Day prior to the Conversion Date.

Rating Agencies shall mean any of Moody's, S&P or Fitch, which is then providing a rating on the 2023E Subordinated Bonds at the request of the District.

Record Date shall mean (i) with respect to 2023E Subordinated Bonds in a Daily Mode, Weekly Mode, Flexible Mode, Direct Purchase Index Mode or Index Mode, the last Business Day before an Interest Payment Date, and (ii) with respect to 2023E Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, the fifteenth (15th) day (whether or not a Business Day) next preceding each Interest Payment Date.

Redemption Date shall mean the date fixed for redemption of 2023E Subordinated Bonds subject to redemption in any notice of redemption given in accordance with the terms of the Subordinate Master Resolution.

Redemption Price shall mean an amount equal to the principal of and premium, if any, and accrued interest, if any, on the 2023E Subordinated Bonds to be paid on the Redemption Date.

Reimbursement Agreement shall mean any reimbursement agreement, credit agreement, line of credit agreement, standby purchase agreement or other agreement by and between a Credit Provider or Liquidity Provider, as applicable, and the District.

Remarketing Agent shall mean any investment banking firm which may be appointed with respect to the 2023E Subordinated Bonds pursuant to Section 97.01.

Remarketing Agreement shall mean any agreement relating to the 2023E Subordinated Bonds by and between the District and a Remarketing Agent, as it may be amended or supplemented from time to time in accordance with its terms.

Remarketing Proceeds Account shall mean the account by that name in the Purchase Fund created in Section 96.09.

Representations Letter shall mean the Letter of Representations from the District to the Securities Depository in connection with the 2023E Subordinated Bonds in a book-entry system, as supplemented and amended from time to time.

Sales Certificate shall mean a written certificate of the District executed by the Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District or the designee of any of them prior to the issuance of the 2023E Subordinated Bonds setting forth the principal amount, Maturity Date or Maturity Dates, initial Interest Rate Mode, initial interest rate or rates, and such other matters with respect to the 2023E Subordinated Bonds as such officer may deem appropriate, as provided in Section 94.02.

S&P shall mean S&P Global Ratings and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “S&P” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent, if any.

S&P Municipal Bond 7 Day High Grade Rate Index shall mean for a Rate Determination Date, the level of the “S&P Municipal Bond 7 Day High Grade Rate Index”

(formerly known as the J.J. Kenny Index) maintained by Standard and Poor's for a one-week maturity as published each day.

Securities Depository shall mean The Depository Trust Company, and such other securities depository as the District may designate in a certificate of the District delivered to the Trustee.

Serial Bonds shall mean the 2023E Subordinated Bonds maturing on the Serial Maturity Dates, as determined pursuant to Section 94.11(b).

Serial Maturity Dates shall mean the dates on which the Serial Bonds mature, as determined pursuant to Section 94.11(b).

Serial Payments shall mean the payments to be made in payment of the principal of the Serial Bonds on the Serial Maturity Dates.

Short-Term Mode shall mean the Daily Mode, the Weekly Mode or the Flexible Mode.

SIFMA Index shall mean, for any applicable Rate Determination Date, the level of the index which is issued weekly and which is compiled from the weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meet specific criteria established from time to time by SIFMA and issued on Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day. If the SIFMA Index is no longer published, then "SIFMA Index" shall mean the S&P Municipal Bond 7 Day High Grade Rate Index. If the S&P Municipal Bond 7 Day High Grade Rate Index is no longer published, then "SIFMA Index" shall mean the prevailing rate determined by the Calculation Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Calculation Agent to be comparable under the circumstances to the criteria used by SIFMA to determine the SIFMA Index immediately prior to the date on which SIFMA ceased publication of the SIFMA Index. Notwithstanding the foregoing, if the SIFMA Index as determined as provided above would be less than 0.0%, then the SIFMA Index will be deemed to be 0.0%.

Substitution Date shall mean the date upon which an Alternate Credit Enhancement or Alternate Liquidity Facility is scheduled to be substituted for a Credit Enhancement or Liquidity Facility then in effect.

Taxable Date shall mean the date on which interest on the 2023E Subordinated Bonds is first includable in gross income of the Holder (including, without limitation, any previous Holder) thereof as a result of an Event of Taxability as such a date is established pursuant to a Determination of Taxability.

Taxable Rate shall mean an interest rate per annum at all times equal to the product of the Direct Purchase Index Rate then in effect multiplied by the Taxable Rate Factor.

Taxable Rate Factor shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Tendered Bonds shall mean 2023E Subordinated Bonds tendered for purchase by the Holders or Beneficial Owners thereof pursuant to Section 96.01 or subject to mandatory tender for purchase on a Mandatory Purchase Date pursuant to Section 96.02.

Tender Notice shall mean a notice delivered by Electronic Means or in writing with respect to a 2023E Subordinated Bond that states (i) the principal amount of such 2023E Subordinated Bond to be purchased pursuant to Section 96.01, (ii) the Purchase Date on which such 2023E Subordinated Bond is to be purchased, (iii) applicable payment instructions with respect to the 2023E Subordinated Bonds being tendered for purchase and (iv) an irrevocable demand for such purchase.

Tender Notice Deadline with respect to a 2023E Subordinated Bond shall mean (i) during a Daily Mode with respect to such 2023E Subordinated Bond, 11:00 a.m. on any Business Day and (ii) during a Weekly Mode with respect to such 2023E Subordinated Bond, 5:00 p.m. on a Business Day not less than seven days prior to the applicable Purchase Date.

Term Rate shall mean the per annum interest rate for 2023E Subordinated Bonds in the Term Rate Mode determined pursuant to Section 94.07(a).

Term Rate Mode shall mean the Interest Rate Mode during which the 2023E Subordinated Bonds bear interest at the Term Rate.

Term Rate Period shall mean the period from (and including) the date on which the 2023E Subordinated Bonds begin to bear interest in a Term Rate Mode to (but excluding) the commencement date of the next succeeding Interest Period, including another Term Rate Period.

2023 Tax Certificate shall mean the Tax Certificate executed and delivered by the District in connection with the issuance of the 2023E Subordinated Bonds, as amended or supplemented from time to time in accordance with its terms.

Weekly Mode shall mean the Interest Rate Mode during which the 2023E Subordinated Bonds bear interest at the Weekly Rate.

Weekly Rate shall mean the per annum interest rate on 2023E Subordinated Bonds in the Weekly Mode determined pursuant to Section 94.06(b).

Weekly Rate Period shall mean the period during which a 2023E Subordinated Bond in the Weekly Mode shall bear a Weekly Rate, which shall be the period commencing on Thursday of each week to and including Wednesday of the following week, except (i) the first Weekly Rate Period, which shall be from the Conversion Date on which the Interest Rate Mode for the 2023E Subordinated Bonds is changed to a Weekly Mode to and including the Wednesday of the following week, and (ii) the last Weekly Rate Period which shall end on the day preceding the earliest to occur of the Conversion Date on which the Interest Rate Mode for the 2023E Subordinated Bonds is changed from the Weekly Mode to a different Interest Rate Mode, the Maturity Date or the Mandatory Purchase Date for such 2023E Subordinated Bond.

ARTICLE XCIV

THE 2023E SUBORDINATED BONDS

Section 94.01. Authorization and Purpose of 2023E Subordinated Bonds.

The Board hereby authorizes the issuance of a series of revenue bonds of the District in accordance with the Subordinate Master Resolution, designated as “Subordinated Electric Revenue Bonds, 2023 Series E” (the “2023E Subordinated Bonds”) for the purpose of (i) financing and refinancing improvements and additions to the District’s Electric System, including through the payment of all or a portion of the District’s outstanding commercial paper notes (to the extent set forth in the Sales Certificate), (ii) refunding the Refunded Bonds (to the extent set forth in the Sales Certificate), and (iii) paying costs of issuance (to the extent set forth in the Sales Certificate).

Section 94.02. Terms, Registration, Denominations, Medium, Method and Place of Payment and Dating of 2023E Subordinated Bonds.

(a) The 2023E Subordinated Bonds shall be issued in the aggregate principal amount which, together with the aggregate principal amount, if any, of the District’s Electric Revenue Bonds sold and issued pursuant to the District’s Sixty-Sixth Supplemental Resolution adopted on the date hereof, Subordinated Electric Revenue Refunding Bonds, 2023 Series C, Subordinated Electric Revenue Bonds, 2023 Series D, and Subordinated Electric Revenue Refunding Bonds, 2023 Series F, shall not exceed \$630,000,000, shall bear interest at such initial rate or rates for such initial Interest Period, shall bear interest in such initial Interest Rate Mode, shall mature and become payable as to principal on such Maturity Date or Maturity Dates (not to exceed forty (40) years from the date of issuance of the 2023E Subordinated Bonds) in the amount and be subject to such mandatory sinking fund account payments on such mandatory sinking fund account payment dates, if any, all as set forth in the Sales Certificate. In addition to the provisions required pursuant to the terms of this Sixteenth Supplemental Resolution to be specified in the Sales Certificate, the Sales Certificate may contain such provisions, in a form approved by the District’s Bond Counsel and the District’s counsel, as the officer executing the Sales Certificate may deem necessary or desirable and consistent with the purpose of this Sixteenth Supplemental Resolution, including provisions (i) adding additional covenants and agreements to be observed by the District, (ii) curing, correcting, amending or supplementing any ambiguous, defective or ineffective provision contained in the Subordinate Master Resolution or this Sixteenth Supplemental Resolution, or (iii) amending or supplementing any provision contained herein to the extent necessary to obtain Credit Enhancement or a Liquidity Facility, to obtain a rating on the 2023E Subordinated Bonds, or to provide for the issuance of the 2023E Subordinated Bonds if, in the judgment of such officer such rating or provision is reasonable. The Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District, or the designee of any of them, is hereby authorized and instructed to execute and deliver the Sales Certificate and, upon execution and delivery thereof, the Sales Certificate shall be incorporated herein and in the Subordinate Master Resolution by reference. The execution and delivery of the Sales Certificate by any such officer shall be conclusive evidence that, where any approval, determination of necessity, desirability or consistency with the purpose of this Sixteenth Supplemental Resolution, or judgment or

determination of reasonableness is required to be given or made, such approval, judgment or determination has been given or made.

(b) The 2023E Subordinated Bonds shall be issued in the form of fully registered 2023E Subordinated Bonds in Authorized Denominations and no provision of the Subordinate Master Resolution relating to coupon bonds or coupons shall apply to the 2023E Subordinated Bonds. 2023E Subordinated Bonds (other than 2023E Subordinated Bonds in the Direct Purchase Index Mode) shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2023E Subordinated Bonds and shall be registered as set forth in Section 98.04 of this Sixteenth Supplemental Resolution. 2023E Subordinated Bonds in the Direct Purchase Index Mode shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2023E Subordinated Bonds and shall be registered in the name of the Holder thereof or as otherwise directed by such Holder. Registered ownership of the 2023E Subordinated Bonds, or any portion thereof, may not thereafter be transferred except as set forth in the Continuing Covenant Agreement (during any time that the 2023E Subordinated Bonds are in the Direct Purchase Index Mode), Section 2.05 of the Subordinate Master Resolution and Section 98.04 of this Sixteenth Supplemental Resolution. Each 2023E Subordinated Bond in the Direct Purchase Index Mode shall contain a legend indicating that the transferability of such 2023E Subordinated Bond is subject to the restrictions set forth in this Sixteenth Supplemental Resolution.

(c) The 2023E Subordinated Bonds shall be dated as of the date of their initial issuance and shall be numbered in such manner as is determined by the Trustee.

(d) The principal of and premium, if any, and interest on the 2023E Subordinated Bonds shall be payable in lawful money of the United States of America.

(e) Subject to Section 98.04 of this Sixteenth Supplemental Resolution, interest on the 2023E Subordinated Bonds shall be paid on each Interest Payment Date by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode by check mailed on the date on which due to the Holders of the 2023E Subordinated Bonds at the close of business on the Record Date for the 2023E Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2023E Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2023E Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2023E Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of \$1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2023E Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2023E Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2023E Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2023E Subordinated Bonds registered in the name of the Securities Depository (or its nominee), interest on any such 2023E Subordinated Bond shall be payable only upon surrender of such 2023E Subordinated Bond at the office of the Paying Agent.

(f) Subject to Section 98.04 of this Sixteenth Supplemental Resolution, the principal of and premium, if any, on each 2023E Subordinated Bond shall be payable on the Principal Payment Date of such 2023E Subordinated Bond upon surrender thereof at the office of the Paying Agent; provided that the Paying Agent may agree with the Holder of any 2023E Subordinated Bond (and hereby does so agree with the Bank during any Direct Purchase Index Rate Period) that such Holder may, in lieu of surrendering the same for a new 2023E Subordinated Bond, endorse on such 2023E Subordinated Bond a record of partial payment of the principal of such 2023E Subordinated Bond in the form set forth below (which shall be typed or printed on such 2023E Subordinated Bond):

PAYMENTS ON ACCOUNT OF PRINCIPAL

Payment Date	Principal Amount Paid	Balance of Principal Amount Unpaid	Signature of Holder
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The Paying Agent shall maintain a record of each such partial payment made in accordance with the foregoing agreement and such record of the Paying Agent shall be conclusive. Such partial payment shall be valid upon payment of the amount thereof to the Holder of such 2023E Subordinated Bond, and the District, the Trustee and the Paying Agent shall be fully released and discharged from all liability to the extent of such payment regardless of whether such endorsement shall or shall not have been made upon such 2023E Subordinated Bond by the Holder thereof and regardless of any error or omission in such endorsement.

(g) Except as may be specifically set forth herein, the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District may treat the Holder of a 2023E Subordinated Bond as the absolute owner thereof for all purposes, whether or not such 2023E Subordinated Bond shall be overdue, and the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District shall not be affected by any knowledge or notice to the contrary. Payment of the principal of and premium, if any, and interest on each 2023E Subordinated Bond shall be made only to such Holder, which payments shall be valid and effectual to satisfy and discharge the liability of such 2023E Subordinated Bond to the extent of the sum or sums so paid. All 2023E Subordinated Bonds paid at maturity or on earlier redemption pursuant to the provisions of this Section shall be cancelled by the Paying Agent.

(h) Each 2023E Subordinated Bond shall bear interest at the applicable rate or rates during each applicable Interest Accrual Period until the entire Principal Amount thereof has been paid.

(i) The Sales Certificate shall designate the series, amounts and maturity or sinking fund payment dates of the Refunded Bonds, if any.

Section 94.03. Payment of Principal and Interest of 2023E Subordinated Bonds; Acceptance of Terms and Conditions.

(a) The interest on each 2023E Subordinated Bond shall become due and payable on the Interest Payment Dates with respect to such 2023E Subordinated Bond to and including the Maturity Date of such 2023E Subordinated Bond, and on each Redemption Date and on the date of any acceleration prior thereto. The principal of each 2023E Subordinated Bond shall become due and payable on the Principal Payment Date of such 2023E Subordinated Bond.

(b) By the acceptance of its 2023E Subordinated Bond, the Holder thereof shall be deemed to have agreed to all the terms and provisions of such 2023E Subordinated Bond as specified in such 2023E Subordinated Bond and the Subordinate Master Resolution, including without limitation the applicable Interest Periods, interest rates (including any applicable Alternate Rate), Purchase Dates, Mandatory Purchase Dates, Purchase Prices, mandatory and optional purchase and redemption provisions applicable to such 2023E Subordinated Bond, method and timing of purchase, redemption and payment. Such Holder further agrees that if, on any date upon which its 2023E Subordinated Bond is to be purchased, redeemed or paid at maturity or earlier due date, funds are on deposit with the Paying Agent or the Trustee to pay the full amount due on such 2023E Subordinated Bond, then such Holder shall have no rights under the Subordinate Master Resolution other than to receive such full amount due with respect to such 2023E Subordinated Bond and that interest on such 2023E Subordinated Bond shall cease to accrue as of such date.

(c) Notwithstanding anything herein to the contrary, while any 2023E Subordinated Bonds are Liquidity Provider Bonds, such Liquidity Provider Bonds shall bear interest and be payable at the times, in the manner and in the amounts required under the Liquidity Facility supporting such 2023E Subordinated Bonds or the Reimbursement Agreement related thereto.

Section 94.04. Calculation and Payment of Interest; Change in Interest Rate Mode; Maximum Rate.

(a) When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is the SIFMA Index, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is an index other than the SIFMA Index, interest shall be calculated on the basis specified in writing by the District on or before the first day of the applicable Direct Purchase Index Rate Period or Index Rate Period. When a Short-Term Mode is in effect, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Term Rate Mode or a Fixed Rate Mode is in effect, interest shall be calculated on the basis of a 360-day year comprised of twelve 30-day months. Payment of unpaid interest accrued on each 2023E Subordinated Bond during each Interest Accrual Period shall be made on the applicable Interest Payment Date for such 2023E Subordinated Bond to the Holder of record of such 2023E Subordinated Bond on the applicable Record Date.

(b) The 2023E Subordinated Bonds in any Interest Rate Mode other than a Fixed Rate Mode may be changed to any other Interest Rate Mode at the times and in the manner hereinafter provided. Subsequent to such change in Interest Rate Mode (other than a change to a Fixed Rate Mode), the 2023E Subordinated Bonds may again be changed to a different Interest Rate Mode at the times and in the manner hereinafter provided. A Fixed Rate Mode shall be in effect until the Maturity Date, or acceleration thereof prior to the Maturity Date, and the 2023E Subordinated Bonds in a Fixed Rate Mode may not be changed to any other Interest Rate Mode.

(c) Subject to Section 94.09(b)(iii), no 2023E Subordinated Bonds shall bear interest at an interest rate higher than the Maximum Rate with respect thereto.

(d) In the absence of manifest error, the determination of interest rates (including any determination of rates in connection with a New Mode) and Interest Periods by the Remarketing Agent or the Calculation Agent, as applicable, as provided herein, and the record of interest rates maintained by the Paying Agent shall be conclusive and binding upon the Remarketing Agent, the Paying Agent, the Trustee, the District, the Holders and the Beneficial Owners.

Section 94.05. Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and in Section 94.04 hereof, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2023E Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2023E Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2023E Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2023E Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2023E Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or

Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Section 94.06. Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2023E Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023E Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period. In making any such determination the Remarketing Agent shall not take into account the per annum rate of interest that would be applicable to Liquidity Provider Bonds pursuant to the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

(a) During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

(b) During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Section 94.07. Determination of Term Rates and Fixed Rates.

(a) Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. Except as set forth in Section 94.11(a)(ii), the Term Rate shall be the minimum rate which, in the sole judgment of the Remarketing Agent, would result in a sale of such 2023E Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected, and the Call Protection Date specified, by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

(b) Fixed Rates. The Remarketing Agent shall determine the Fixed Rate for 2023E Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2023E Subordinated Bonds will have Serial Maturity Dates in accordance with Section 94.11(b)(v)). Except as set forth in Section 94.11(b)(v), the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2023E Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 94.11(b)(v), the Fixed Rate so established shall remain in effect until the Maturity Date of such 2023E Subordinated Bonds.

Section 94.08. Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2023E Subordinated Bonds (other than 2023E Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2023E Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2023E Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2023E Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2023E Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2023E Subordinated Bonds.

(a) For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2023E Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

(b) For 2023E Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2023E Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

Section 94.09. Determination of Direct Purchase Index Rates.

(a) During each Direct Purchase Index Rate Period, the 2023E Subordinated Bonds shall, subject to subsection (b) of this Section 94.09, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2023E Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2023E Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2023E Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2023E Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Master Resolution or this Sixteenth Supplemental Resolution to the contrary, including, without limitation, Section 96.02(b), but subject to Section 94.04(c) and Section 94.09(b)(ii) and (iii), from and after any Taxable Date, the interest rate on 2023E Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Master Resolution or this Sixteenth Supplemental Resolution to the contrary, including, without limitation, Section 96.02(b), but subject to Section 94.04(c) and Section 94.09(b)(iii), from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2023E Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2023E

Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Master Resolution or this Sixteenth Supplemental Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2023E Subordinated Bonds exceeds the Maximum Rate for such 2023E Subordinated Bonds, then (A) such 2023E Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2023E Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2023E Subordinated Bonds as calculated pursuant to this Section 94.09 and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2023E Subordinated Bonds as calculated pursuant to this Section 94.09 is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2023E Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2023E Subordinated Bonds are redeemed or tendered for purchase in accordance with this Sixteenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2023E Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything herein to the contrary, but subject to Section 94.04(c) and Section 94.09(b)(i), (ii) and (iii) during any Amortization Period, the 2023E Subordinated Bonds shall bear interest at the Bank Rate.

Section 94.10. Determination of Index Rates. During each Index Rate Period, the 2023E Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2023E Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2023E Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2023E Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2023E Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2023E Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2023E Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2023E Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the District shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2023E Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All

dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2023E Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Section 94.11. Changes in Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. Subject to the provisions of this Section, the District may effect a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period with respect to the 2023E Subordinated Bonds by following the procedures set forth in this Section.

(a) Changes to Interest Rate Modes Other Than Fixed Rate Mode; Changes in Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. The Interest Rate Mode for the 2023E Subordinated Bonds (other than the 2023E Subordinated Bonds in the Fixed Rate Mode) may be changed from one Interest Rate Mode to another Interest Rate Mode (other than the Fixed Rate Mode) and the Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2023E Subordinated Bonds may be changed, as follows:

(i) Notice to Notice Parties; Notice to Holders. No later than a Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2023E Subordinated Bonds preceding the proposed Conversion Date, the District shall give written notice to the Notice Parties of its intention to effect a change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period from the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period then prevailing (for purposes of this Section, the “Current Mode”) to another Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period (for purposes of this Section, the “New Mode”) specified in such written notice. Notice of the proposed change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be given by the Trustee by mail to the Holders of the 2023E Subordinated Bonds not less than the 10th day next preceding the proposed Conversion Date, provided that no notice need be given for a Conversion Date occurring on the Business Day following the last day of a Flexible Rate Period, an Index Rate Period or a Term Rate Period or on a Substitution Date. Such notice shall state: (1) the proposed Conversion Date; (2) that the 2023E Subordinated Bonds will be subject to mandatory tender for purchase on the proposed Conversion Date (regardless of whether all of the conditions to the change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period are satisfied); and (3) the Purchase Price of the 2023E Subordinated Bonds and the place of delivery for purchase of the 2023E Subordinated Bonds; provided that, if the proposed change is from one Direct Purchase Index Rate Period to a new Direct Purchase Index Rate Period and any Holder of the 2023E Subordinated Bonds shall continue to be a Holder of 2023E Subordinated Bonds

in the new Direct Purchase Index Rate Period, the Holder may elect to retain its 2023E Subordinated Bonds by filing with the District and the Trustee not less than five days prior to the proposed Conversion Date a written notice identifying such 2023E Subordinated Bonds and the principal amount it wishes to retain.

(ii) Determination of Interest Rates. The New Mode shall commence on the Conversion Date and the interest rate(s) (together, in the case of a change to the Flexible Mode, with the Interest Period(s)) shall be determined in the manner provided in Sections 94.05, 94.06, 94.07, 94.09 and 94.10, as applicable; provided, however, that, in the case of a change to the Term Rate Mode, or from one Term Rate Period to a new Term Rate Period, if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to sell some or all of the 2023E Subordinated Bonds at a premium or a discount to par.

(iii) Conditions Precedent.

(1) The Conversion Date shall be:

(A) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2023E Subordinated Bonds end;

(B) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(C) in the case of a change from the Term Rate Mode to another Interest Rate Mode, or from one Term Rate Period to a new Term Rate Period, any day on which the applicable 2023E Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(D) in the case of a change from the Index Mode to another Interest Rate Mode, or from one Index Rate Period to a new Index Rate Period, any day on which the applicable 2023E Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(E) in the case of a change from the Direct Purchase Index Mode or from one Direct Purchase Index Rate Period to another Direct Purchase Index Rate Period, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(2) If the 2023E Subordinated Bonds to be converted are Flexible Rate Bonds, no Interest Period with respect to such 2023E Subordinated Bonds set after delivery by the

District to the Remarketing Agent of the notice of the intention to effect a change in Interest Rate Mode shall extend beyond the proposed Conversion Date.

(3) The following items shall have been delivered to the District and the Trustee, on or prior to the Conversion Date:

(A) a Favorable Opinion of Bond Counsel dated the Conversion Date; and

(B) if there is to be a Liquidity Facility or an Alternate Liquidity Facility or Credit Enhancement or an Alternate Credit Enhancement delivered in connection with such change, the items required by Section 96.08(d).

(4) If no Liquidity Facility is in effect to provide funds for the purchase of 2023E Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 96.04 shall not be less than the amount required to purchase all of the 2023E Subordinated Bonds on the Conversion Date at the Purchase Price.

(b) Change to Fixed Rate Mode. At the option of the District, the Interest Rate Mode for the 2023E Subordinated Bonds may be changed to the Fixed Rate Mode as provided in this Section 94.11(b). On any Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2023E Subordinated Bonds before the proposed Conversion Date pursuant to clause (ii) of this subsection (b), the District shall give written notice to the Notice Parties stating that the Interest Rate Mode will be changed to the Fixed Rate Mode and setting forth the proposed Conversion Date. In addition, such notice shall state whether some or all of the 2023E Subordinated Bonds to be converted shall be converted to Serial Bonds and, if so, the applicable Serial Maturity Dates and Serial Payments, all as determined pursuant to clause (v) of this subsection (b). Any such change in Interest Rate Mode shall be made as follows:

(i) Conversion Date. The Conversion Date shall be:

(1) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2023E Subordinated Bonds end;

(2) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(3) in the case of a change from the Term Rate Mode, any day on which the applicable 2023E Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(4) in the case of a change from the Index Mode, any day on which the applicable 2023E Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(5) in the case of a change from the Direct Purchase Index Mode, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(ii) Notice to Holders. Not less than the 10th day next preceding the Conversion Date, the Trustee shall mail, in the name of the District, a notice of such proposed change to the Holders of the 2023E Subordinated Bonds stating that the Interest Rate Mode will be changed to the Fixed Rate Mode, the proposed Conversion Date and that such Holder is required to tender such Holder's 2023E Subordinated Bonds for purchase on such proposed Conversion Date.

(iii) General Provisions Applying to Change to Fixed Rate Mode. The change to the Fixed Rate Mode shall not occur unless the following items shall have been delivered to the District and the Trustee and the following conditions shall have been satisfied, in each case on or prior to the Conversion Date:

(1) a Favorable Opinion of Bond Counsel dated the Conversion Date;

(2) if there is to be Credit Enhancement or Alternate Credit Enhancement delivered in connection with such change, the items required by Section 96.08(d) in connection with the delivery of Credit Enhancement or Alternate Credit Enhancement; and

(3) if no Liquidity Facility is in effect to provide funds for the purchase of 2023E Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 96.04 shall not be less than the amount required to purchase all of the 2023E Subordinated Bonds on the Conversion Date at the Purchase Price.

(iv) Determination of Interest Rate. The Fixed Rate (or Fixed Rates in the case of Serial Bonds) for the 2023E Subordinated Bonds to be converted to the Fixed Rate Mode shall be established by the Remarketing Agent on the Rate Determination Date applicable thereto pursuant to the provisions of Section 94.07(b). Such Fixed Rate or Fixed Rates shall remain in effect until the Maturity Date or Serial Maturity Dates, as applicable, of such 2023E Subordinated Bonds. Such determination shall be conclusive and binding upon the District, the Trustee, the Credit Provider, if any, and the Holders of the 2023E Subordinated Bonds to which such rate will be applicable. Not later than 5:00 p.m. on the date of determination of the Fixed Rate, the Remarketing Agent shall notify the District, the Trustee and the Credit Provider, if any, of such rate by telephone.

(v) Serialization and Sinking Fund Account Redemption; Price. Upon conversion of the 2023E Subordinated Bonds to the Fixed Rate Mode, the 2023E Subordinated Bonds shall be remarketed at par, shall mature on the same Maturity Date and be subject to the same mandatory sinking fund account redemption, if any, and optional redemption provisions as set forth in this Sixteenth Supplemental Resolution prior to the Conversion; provided, however, that if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to (1) have some of the 2023E Subordinated Bonds be Serial Bonds and some subject to mandatory sinking fund

account redemption even if such 2023E Subordinated Bonds were not Serial Bonds or subject to mandatory sinking fund account redemption prior to such change, (2) change the optional redemption dates and/or premiums set forth in Section 95.03(b), and/or (3) sell some or all of the 2023E Subordinated Bonds at a premium or a discount to par.

(c) Failure to Satisfy Conditions Precedent to an Interest Rate Mode Change.

In the event the conditions described above in subsections (a) or (b), as applicable, of this Section have not been satisfied by the applicable Conversion Date, then the New Mode shall not take effect (although any mandatory tender shall be made on such date if notice has been sent to the Holders stating that such 2023E Subordinated Bonds would be subject to mandatory purchase on such date). If the failed change in Interest Rate Mode was from the Flexible Mode, such 2023E Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the failed Conversion Date in accordance with Section 94.05. If the failed change in Interest Rate Mode was from the Daily Mode, such 2023E Subordinated Bonds shall remain in the Daily Mode, and if the failed change in Interest Rate Mode was from the Weekly Mode, such 2023E Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in accordance with the applicable provisions of Section 94.06 on and as of the failed Conversion Date. If the failed change in Interest Rate Mode was from the Term Rate Mode, then such 2023E Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 94.07. If the failed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2023E Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 94.09. If the failed change in Interest Rate Mode was from the Index Mode, then the 2023E Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 94.10.

(d) Rescission of Election. Notwithstanding anything herein to the contrary, the District may rescind any election by it to change an Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period as described above prior to the Conversion Date by giving written notice thereof to the Notice Parties prior to 10:00 a.m. on the Business Day preceding such Conversion Date. If the Trustee receives notice of such rescission prior to the time the Trustee has given notice to the Holders of the 2023E Subordinated Bonds, then such notice of change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be of no force and effect. If the Trustee receives notice from the District of rescission of a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period after the Trustee has given notice thereof to the Holders of the 2023E Subordinated Bonds, then, if the proposed Conversion Date would have been a Mandatory Purchase Date, such date shall continue to be a Mandatory Purchase Date and the Interest Rate Mode for the 2023E Subordinated Bonds shall be determined as set forth in the remainder of this paragraph. If the proposed change in Interest Rate Mode was from the Flexible Mode, such 2023E Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the proposed Conversion Date in accordance with Section 94.05. If the proposed change in Interest Rate Mode was from the Daily Mode, such 2023E Subordinated Bonds shall remain in the Daily Mode, and if the proposed change in Interest Rate Mode was from the Weekly Mode, such 2023E Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in

accordance with the applicable provisions of Section 94.06 on and as of the proposed Conversion Date. If the proposed change in Interest Rate Mode was from the Term Rate Mode, then such 2023E Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 94.07. If the proposed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2023E Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 94.09. If the proposed change in Interest Rate Mode was from the Index Mode, then the 2023E Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 94.10.

ARTICLE XCV

REDEMPTION OF 2023E SUBORDINATED BONDS

Section 95.01. Optional Redemption of Flexible Rate Bonds. 2023E Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2023E Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Section 95.02. Optional Redemption of 2023E Subordinated Bonds in the Daily Mode and the Weekly Mode. 2023E Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023E Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 95.03. Optional Redemption of 2023E Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

(a) 2023E Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2023E Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2023E Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2023E Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(b) 2023E Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2023E Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(c) The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2023E Subordinated Bonds so changed to a Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

(d) Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2023E Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Section 95.04. Optional and Mandatory Redemption of 2023E Subordinated Bonds in the Direct Purchase Index Mode.

(a) Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2023E Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023E Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

(b) 2023E Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 95.05. Mandatory Sinking Fund Account Redemption of 2023E Subordinated Bonds and Redemption of Liquidity Provider Bonds.

(a) The 2023E Subordinated Bonds shall be subject to redemption prior to maturity from mandatory sinking fund account payments for the 2023E Subordinated Bonds on the dates, if any, specified in the Sales Certificate, at a Redemption Price equal to the principal amount of the 2023E Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The mandatory sinking fund account payments for the 2023E Subordinated Bonds shall be in the amounts and payable on the dates set forth in the Sales Certificate.

(b) Notwithstanding anything herein to the contrary, Liquidity Provider Bonds are subject to redemption on the dates, in the amounts and otherwise in accordance with the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

Section 95.06. Funds for Redemption of 2023E Subordinated Bonds. Unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023E Subordinated Bonds, the Redemption Price of 2023E Subordinated Bonds

(other than Liquidity Provider Bonds) shall be paid solely from (1) moneys obtained from a drawing on the Credit Enhancement supporting the 2023E Subordinated Bonds pursuant to Section 96.08(a) or (2) Available Moneys.

Section 95.07. Selection of 2023E Subordinated Bonds for Redemption.

Whenever provision is made for the redemption of less than all of the 2023E Subordinated Bonds of any one maturity, the Trustee shall select the 2023E Subordinated Bonds to be redeemed, from the Outstanding 2023E Subordinated Bonds of such maturity not previously called for redemption, by lot in any manner which the Trustee deems fair; provided, however, that Liquidity Provider Bonds shall be redeemed prior to the redemption of other 2023E Subordinated Bonds; provided further, however, that during a Direct Purchase Index Rate Period, the 2023E Subordinated Bonds shall be redeemed pro rata. The Trustee shall promptly notify the District in writing of the numbers of the 2023E Subordinated Bonds so selected for redemption.

Section 95.08. Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2023E Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2023E Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023E Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2023E Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2023E Subordinated Bonds to be redeemed, and shall also state that the interest on the 2023E Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023E Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2023E Subordinated Bonds to be redeemed.

Notice of optional redemption shall be given by the Trustee for and on behalf of the District, at the written request of the District (which request shall be given to the Trustee (unless waived by the Trustee) at least twenty-five (25) days prior to the date fixed for redemption or such shorter period as is acceptable to the Trustee). Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption.

Notwithstanding the foregoing, notice of redemption shall not be required for 2023E Subordinated Bonds redeemed on a Mandatory Purchase Date.

Section 95.09. Partial Redemption of 2023E Subordinated Bond. Upon surrender of any 2023E Subordinated Bond redeemed in part only, the District shall execute and the Trustee shall deliver to the registered owner thereof, at the expense of the District, a new 2023E Subordinated Bond or Bonds, of the same maturity, of Authorized Denominations in

aggregate principal amount equal to the unredeemed portion of the 2023E Subordinated Bond surrendered.

Section 95.10. Effect of Redemption. Notice of redemption having been duly given as aforesaid, and moneys for payment of the Redemption Price being held by the Trustee, the 2023E Subordinated Bonds so to be redeemed shall, on the date designated in such notice, become due and payable at the Redemption Price specified in such notice; and from and after the date so designated interest on the 2023E Subordinated Bonds so designated for redemption shall cease to accrue and the Holders and Beneficial Owners of said 2023E Subordinated Bonds shall have no rights in respect thereof, except to receive payment of the Redemption Price thereof.

Section 95.11. Disposition of Redeemed 2023E Subordinated Bonds. All 2023E Subordinated Bonds redeemed pursuant to the provisions of this Article XCV shall be delivered to and cancelled by the Trustee and shall thereafter be delivered by the Trustee to, or upon the order of, the District, and no 2023E Subordinated Bonds shall be issued in place thereof.

ARTICLE XCVI

PURCHASE OF 2023E SUBORDINATED BONDS

Section 96.01. Optional Tenders of 2023E Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 96.06, the Beneficial Owners of 2023E Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2023E Subordinated Bonds (or portions of those 2023E Subordinated Bonds, provided that no 2023E Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Section 96.02. Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode.

(a) The 2023E Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2023E Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2023E Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2023E Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2023E

Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

(b) Notwithstanding subparagraph (a) above and anything to the contrary in this Sixteenth Supplemental Resolution, in the event the 2023E Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2023E Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2023E Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing, in which case the 2023E Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2023E Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2023E Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2023E Subordinated Bonds may be subject to optional redemption or purchase at the sole option of the District at any time with notice as and to the extent provided in the Continuing Covenant Agreement.

Section 96.03. Remarketing of 2023E Subordinated Bonds; Notices.

(a) Remarketing of 2023E Subordinated Bonds. The Remarketing Agent shall use its best efforts pursuant to the terms and conditions of the Remarketing Agreement to offer for sale:

(i) all 2023E Subordinated Bonds or portions thereof as to which a Tender Notice has been delivered pursuant to Section 96.01; and

(ii) all 2023E Subordinated Bonds required to be purchased on a Mandatory Purchase Date described in clauses (i), (ii), (iii), (iv), (viii) or (ix) of the definition thereof; and

(iii) any Liquidity Provider Bonds (A) purchased on a Purchase Date described in clause (i) or (ii) above, (B) with respect to which the Liquidity Provider has provided notice to the Trustee and the Remarketing Agent that it has reinstated the Available Amount, (C) with respect to which an Alternate Liquidity Facility and Alternate Credit Enhancement is in effect (if such funds were secured by a Credit Enhancement prior to becoming Liquidity Provider Bonds, which Credit Enhancement is no longer in effect), and/or (D) which are being marketed as Fixed Rate Bonds.

The Remarketing Agent shall not remarket 2023E Subordinated Bonds to the District or any affiliate thereof. In connection with the remarketing of any 2023E Subordinated Bonds with respect to which notice of redemption or notice of mandatory purchase has been

given, the Remarketing Agent shall notify each person to which such 2023E Subordinated Bonds are remarketed of such notice of redemption or notice of mandatory purchase.

Anything in this Sixteenth Supplemental Resolution to the contrary notwithstanding, if there shall have occurred and be continuing either a Credit Provider Failure or a Liquidity Provider Failure with respect to a Series of 2023E Subordinated Bonds, the Remarketing Agent shall not remarket such 2023E Subordinated Bonds. All other provisions of this Sixteenth Supplemental Resolution, including without limitation, those relating to the setting of interest rates and Interest Periods and mandatory and optional purchases, shall remain in full force and effect during the continuance of such Credit Provider Failure or Liquidity Provider Failure.

(b) Notice of Remarketing; Registration Instructions; New Bonds. On each date on which a 2023E Subordinated Bond is to be purchased pursuant to this Article XCVI:

(i) the Remarketing Agent shall notify the Trustee by Electronic Means by 11:30 a.m. if it has been unable to remarket any tendered 2023E Subordinated Bonds, and shall include in such notice the principal amount of 2023E Subordinated Bonds it has been unable to remarket;

(ii) the Remarketing Agent shall notify the Trustee by Electronic Means not later than 1:00 p.m. of the names of the purchasers of the successfully remarketed 2023E Subordinated Bonds and such information as may be necessary to register the 2023E Subordinated Bonds and the registration instructions with respect thereto;

(iii) the Remarketing Agent shall cause the proceeds of the remarketing by such Remarketing Agent of tendered 2023E Subordinated Bonds to be paid to the Trustee in immediately available funds not later than 12:00 noon on the Purchase Date for such 2023E Subordinated Bonds; and

(iv) if the 2023E Subordinated Bonds are not in the Book-Entry System, the Trustee shall authenticate new 2023E Subordinated Bonds for the respective purchasers thereof which shall be available for pick-up by the Remarketing Agent not later than 2:30 p.m.

(c) Draw on Liquidity Facility or Request for Funds. On each date on which a 2023E Subordinated Bond is to be purchased pursuant to this Article XCVI, if (i) the Remarketing Agent shall have given notice to the Trustee pursuant to clause (b)(i) above that it has been unable to remarket any of the 2023E Subordinated Bonds or (ii) the Trustee has not received from the Remarketing Agent an amount sufficient to pay the Purchase Price of tendered Bonds, by 12:00 noon on the Purchase Date, then the Trustee shall draw on the applicable Liquidity Facility (or if no Liquidity Facility, request funds from the District) by 12:15 p.m. in an amount equal to the Purchase Price of all such 2023E Subordinated Bonds which have not been successfully remarketed, requesting payment not later than 2:45 p.m. on the Purchase Date. Subject to Section 96.04, if a Liquidity Facility is in effect, the Trustee shall also give the District notice by 2:45 p.m. on the Purchase Date if it does not have funds in the Remarketing Proceeds

Account and the Liquidity Facility Purchase Account sufficient to pay the Purchase Price of 2023E Subordinated Bonds tendered on such Purchase Date. Any draw on a Liquidity Facility to be made on a Substitution Date shall be on the Liquidity Facility being replaced.

Section 96.04. Source of Funds for Purchase of 2023E Subordinated Bonds.

By 3:00 p.m. on the date on which a 2023E Subordinated Bond is to be purchased pursuant to this Article XCVI, and except as set forth in Section 96.06(b)(ii), the Trustee shall purchase tendered 2023E Subordinated Bonds from the tendering Holders at the applicable Purchase Price by wire transfer in immediately available funds. Funds for the payment of such Purchase Price shall be derived solely from the following sources in the order of priority indicated and neither the Trustee nor the Remarketing Agent shall be obligated to provide funds from any other source:

(a) immediately available funds on deposit in the Remarketing Proceeds Account established for the 2023E Subordinated Bonds;

(b) immediately available funds on deposit in the Liquidity Facility Purchase Account established for the 2023E Subordinated Bonds; and

(c) moneys of the District on deposit in the District Purchase Account established for the 2023E Subordinated Bonds.

If no Liquidity Facility is in effect with respect to the 2023E Subordinated Bonds, then the District shall be obligated to deposit amounts into the District Purchase Account established for the 2023E Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023E Subordinated Bonds are insufficient therefor. If a Liquidity Facility is in effect with respect to the 2023E Subordinated Bonds, then the District may, but shall not be obligated to, deposit amounts into the District Purchase Account established for the 2023E Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023E Subordinated Bonds and the Liquidity Facility Purchase Account established for the 2023E Subordinated Bonds are insufficient therefor. If so specified in the Sales Certificate with respect to the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period, the failure of the District to deposit amounts into the District Purchase Account when the District is obligated to deposit such amounts under this Section 96.04 shall constitute an “event of default” under Section 9.01 of the Subordinate Master Resolution.

Section 96.05. Delivery of Subordinated Bonds. On each date on which a 2023E Subordinated Bond is to be purchased pursuant to this Article XCVI, such 2023E Subordinated Bond shall be delivered as follows:

(a) 2023E Subordinated Bonds sold by the Remarketing Agent and described in Section 96.04(a) shall be delivered by the Remarketing Agent to the purchasers of such 2023E Subordinated Bonds by 3:00 p.m.;

(b) 2023E Subordinated Bonds purchased by the Trustee with moneys described in Section 96.04(b) shall be registered immediately in the name of the Liquidity

Provider or its nominee (which may be the Securities Depository) or as otherwise specified in writing by the Liquidity Provider and held as specified in writing by the Liquidity Provider, in either case on or before 3:00 p.m.; and

(c) 2023E Subordinated Bonds purchased by the District with moneys described in Section 96.04(c) shall be registered immediately in the name of the District or its nominee on or before 3:00 p.m. 2023E Subordinated Bonds so owned by the District shall continue to be Outstanding under the terms of the Subordinate Master Resolution and be subject to all of the terms and conditions of the Subordinate Master Resolution and shall be subject to remarketing by the Remarketing Agent.

When any Liquidity Provider Bonds are remarketed, the Trustee shall not release 2023E Subordinated Bonds so remarketed to the Remarketing Agent until the Trustee has received confirmation that the Liquidity Facility has been reinstated.

Section 96.06. Book-Entry Tenders.

(a) Notwithstanding any other provision of this Article XCVI to the contrary, all tenders for purchase during any period in which the 2023E Subordinated Bonds are registered in the name of any Securities Depository or its nominee shall be subject to the terms and conditions set forth in the Representations Letter and to any regulations promulgated by the Securities Depository. During any period that the 2023E Subordinated Bonds are registered in the name of DTC or its nominee, the tender option rights of holders of 2023E Subordinated Bonds may be exercised only by a Direct Participant of DTC acting, directly or indirectly, on behalf of a Beneficial Owner of 2023E Subordinated Bonds by giving notice of its election to tender 2023E Subordinated Bonds or portions thereof at the times and in the manner described above. Beneficial Owners will not have any rights to tender 2023E Subordinated Bonds directly to the Trustee. Procedures under which a Beneficial Owner may direct a Direct Participant or DTC, or an Indirect Participant of DTC acting through a Director Participant of DTC, to exercise a tender option right in respect of 2023E Subordinated Bonds or portions thereof in an amount equal to all or a portion of such Beneficial Owner's beneficial ownership interest therein shall be governed by standing instructions and customary practices determined by such Direct Participant or Indirect Participant. During any period that the 2023E Subordinated Bonds are registered in the name of DTC or its nominee, delivery of 2023E Subordinated Bonds required to be tendered for purchase shall be effected by the transfer by a Direct Participant on the applicable Purchase Date of a book-entry credit to the account of the Trustee of a beneficial ownership interest in such 2023E Subordinated Bonds.

(b) Notwithstanding anything expressed or implied herein to the contrary, during any period that a Book-Entry System for the 2023E Subordinated Bonds is maintained by the District:

(i) there shall be no requirement of physical delivery to or by the Trustee or the Remarketing Agent of:

(1) any 2023E Subordinated Bonds subject to mandatory or optional purchase as a condition to the payment of the Purchase Price therefor;

(2) any 2023E Subordinated Bonds that have become Liquidity Provider Bonds; or

(3) any remarketing proceeds of such 2023E Subordinated Bonds or Liquidity Provider Bonds; and

(ii) except as provided in (iii) below, neither the Trustee nor the Paying Agent shall have any responsibility for paying the Purchase Price of any tendered 2023E Subordinated Bond or for remitting remarketing proceeds to any Person; and

(iii) the Trustee's sole responsibilities in connection with the purchase and remarketing of a tendered 2023E Subordinated Bond shall be to:

(1) draw upon the Liquidity Facility to pay the Purchase Price of 2023E Subordinated Bond in the manner provided herein and to remit the amount so drawn to or upon the order of the Securities Depository for the benefit of the tendering Beneficial Owners; and

(2) remit any proceeds derived from the remarketing of a Liquidity Provider Bond and any unused proceeds from a drawing on the Liquidity Facility to the Liquidity Provider.

Section 96.07. No Book-Entry System. During any period that the 2023E Subordinated Bonds shall not be in a Book-Entry System, the following procedures shall be followed:

(a) 2023E Subordinated Bonds shall be delivered (with all necessary endorsements) at or before 12:00 noon on the Purchase Date at the office of the Paying Agent in New York, New York; provided, however, that payment of the Purchase Price shall be made pursuant to this Section only if the 2023E Subordinated Bond so delivered to the Paying Agent conforms in all respects to the description thereof in the notice described in this Section. Payment of the Purchase Price with respect to purchases under this Section shall be made to the Holders of tendered 2023E Subordinated Bonds by wire transfer in immediately available funds by the Paying Agent by 3:00 p.m. on the Purchase Date.

(b) If a 2023E Subordinated Bond to be purchased pursuant to this Article XCVI is not delivered by the Holder to the Paying Agent by 12:00 noon on the date in which such 2023E Subordinated Bond is to be purchased, the Paying Agent shall hold any funds received for the purchase of those 2023E Subordinated Bonds in trust in a separate account and shall pay such funds to the former Holders of the 2023E Subordinated Bonds upon presentation of the 2023E Subordinated Bonds. Such undelivered 2023E Subordinated Bonds shall cease to accrue interest as to the former Holders on such purchase date and moneys representing the Purchase Price shall be available against delivery of those 2023E Subordinated Bonds at the Principal Office of the Paying Agent; provided, however, that any funds which shall be so held by the Paying Agent and which remain unclaimed by the former Holder of a 2023E Subordinated Bond not presented for purchase for a period of two years after delivery of such funds to the Paying Agent, shall, to the extent permitted by law, upon request in writing by the District and the furnishing of security or indemnity to the Paying Agent's satisfaction, be paid to the District free of any trust or lien and thereafter the former Holder of such 2023E Subordinated Bond shall

look only to the District and then only to the extent of the amounts so received by the District without any interest thereon and the Paying Agent shall have no further responsibility with respect to such moneys or payment of the Purchase Price of such 2023E Subordinated Bonds. The Paying Agent shall authenticate a replacement 2023E Subordinated Bond for any undelivered 2023E Subordinated Bond which may then be remarketed by the Remarketing Agent.

(c) The Paying Agent shall hold all 2023E Subordinated Bonds properly tendered to it for purchase hereunder as agent and bailee of, and in escrow for the benefit of, the respective Holders of the 2023E Subordinated Bonds which shall have so tendered such 2023E Subordinated Bonds until moneys representing the Purchase Price of such 2023E Subordinated Bonds shall have been delivered to or for the account of or to the order of such Holders.

Section 96.08. Credit Enhancement and Liquidity Facility.

(a) While a Credit Enhancement is in effect with respect to the 2023E Subordinated Bonds, the Trustee shall, on the Business Day preceding each Interest Payment Date and Principal Payment Date draw on the Credit Enhancement in accordance with the terms thereof so as to receive thereunder with respect to the 2023E Subordinated Bonds secured by the Credit Enhancement by 1:00 p.m. on said Interest Payment Date and Principal Payment Date, an amount, in immediately available funds, equal to the amount of interest and principal payable on such 2023E Subordinated Bonds on such Interest Payment Date and Principal Payment Date. The proceeds of such draws shall be deposited in a separate account in the Subordinated Bond Interest and Principal Fund and shall be applied to pay principal of and interest on such 2023E Subordinated Bonds prior to the application of any other funds held by the Trustee therefor. Amounts held in such account shall be held uninvested and separate and apart from all other funds and accounts. Such accounts shall at all times be Eligible Accounts.

(b) If a Liquidity Facility is in effect with respect to the 2023E Subordinated Bonds, on each date on which a 2023E Subordinated Bond is to be purchased, the Trustee, by demand given by Electronic Means by 12:15 p.m., shall draw on the Liquidity Facility in accordance with the terms thereof so as to receive thereunder by 2:45 p.m. on such date an amount, in immediately available funds, sufficient, together with the proceeds of the remarketing of such 2023E Subordinated Bonds on such date, to enable the Trustee to pay the Purchase Price in connection therewith. The Trustee shall deposit said proceeds in the Liquidity Facility Purchase Account established for the 2023E Subordinated Bonds pursuant to Section 96.09(b) hereof.

(c) Notwithstanding the foregoing paragraphs of this Section, if the Credit Provider and the Liquidity Provider are the same entity, the Trustee shall not draw on the Credit Enhancement with respect to any payments due or made in connection with Liquidity Provider Bonds. In no event shall the Trustee draw on the Credit Enhancement or Liquidity Facility with respect to any payments made or made in connection with 2023E Subordinated Bonds not covered by the Credit Enhancement or Liquidity Facility or 2023E Subordinated Bonds owned by the District.

(d) The District may provide an Alternate Credit Enhancement or Alternate Liquidity Facility on any day on which 2023E Subordinated Bonds to be secured by such Alternate Credit Enhancement or Alternate Liquidity Facility are subject to redemption at par and not later than the fifth (5th) Business Day prior to the Expiration Date of the Credit Enhancement or Liquidity Facility then in effect and supporting such 2023E Subordinated Bonds. The District shall give the Notice Parties written notice of the proposed substitution of an Alternate Credit Enhancement or Alternate Liquidity Facility no less than two (2) Business Days prior to the date on which the Trustee is required to provide notice of the proposed substitution to the Holders of the 2023E Subordinated Bonds. The Trustee shall give notice of such Substitution Date in accordance with Section 96.02. On or before the Substitution Date there shall be delivered to the Trustee (i) the Alternate Credit Enhancement or the Alternate Liquidity Facility in substitution for the Credit Enhancement or Liquidity Facility then in effect, (ii) a Favorable Opinion of Bond Counsel, (iii) a written Opinion of Counsel for the provider of the Alternate Credit Enhancement or Alternate Liquidity Facility, as applicable, to the effect that such Alternate Credit Enhancement or Alternate Liquidity Facility is a valid, legal and binding obligation of the provider thereof, and (iv) unless waived by such entity, written evidence satisfactory to the Credit Provider and the Liquidity Provider of the provision for purchase from the Liquidity Provider of all Liquidity Provider Bonds, at a price equal to the principal amount thereof plus accrued and unpaid interest, and payment of all amounts due to the Credit Provider and the Liquidity Provider under the applicable Reimbursement Agreement or Liquidity Facility on or before the effective date of such Alternate Credit Enhancement or Alternate Liquidity Facility. Upon the satisfaction of the conditions described in the preceding sentence, the Trustee shall accept such Alternate Credit Enhancement or Alternate Liquidity Facility on the close of business on the Substitution Date and shall surrender the Credit Enhancement or Liquidity Facility then in effect to the provider thereof on the Substitution Date; provided, however, that the Trustee shall not surrender the Credit Enhancement or Liquidity Facility then in effect unless and until the Trustee has received all amounts drawn thereunder. If any condition to the substitution is not satisfied, the substitution shall not occur but the 2023E Subordinated Bonds shall remain subject to mandatory purchase on the proposed Substitution Date.

(e) In the event of an extension of the Expiration Date, the District shall give to the Notice Parties, a written notice of the new Expiration Date at least fifteen (15) days prior to the fifth Business Day prior to the Expiration Date in effect prior to such extension.

(f) The references to Credit Enhancement and Liquidity Facility and Credit Provider and Liquidity Provider shall be disregarded during any period during which a Credit Enhancement or Liquidity Facility, as applicable, is not in effect.

(g) The Trustee shall not have any lien on or security interest in any amounts drawn under a Credit Enhancement or a Liquidity Facility or any amounts on deposit in the account described in Section 96.08(a) above in which proceeds of draws on a Credit Enhancement are deposited or a Liquidity Facility Purchase Account.

(h) If at any time during the term of a Credit Enhancement and/or Liquidity Facility any successor Trustee shall be appointed and qualified under the Subordinate Master Resolution, the resigning or removed Trustee shall request that the Credit Provider and/or Liquidity Provider, as applicable, transfer such Credit Enhancement and/or Liquidity Facility to

the successor Trustee and such resignation or removal of the Trustee shall not be effective until the Credit Enhancement and/or Liquidity Facility has been duly transferred (including the payment of any required transfer fee) to such successor Trustee. If the resigning or removed Trustee fails to make this request, the successor Trustee shall do so before accepting appointment.

(i) The Trustee may accept, hold and draw upon a Credit Enhancement and/or a Liquidity Facility issued by itself or by any of its corporate affiliates to provide security and a source of payment for the 2023E Subordinated Bonds. The Trustee covenants that it shall at all times maintain adequate controls to manage any potential conflict of interest. Notwithstanding any other provision herein to the contrary, while the Credit Provider and/or Liquidity Provider is the Trustee or an affiliate of the Trustee and such Credit Provider and/or Liquidity Provider has not failed to honor a properly presented draw on the Credit Enhancement and/or Liquidity Facility, the Trustee shall have no discretion with respect to the acceleration of the 2023E Subordinated Bonds and shall do so only upon the written direction of such Credit Provider and/or Liquidity Provider and as otherwise permitted by the Subordinate Master Resolution. The Trustee shall immediately tender its resignation and take prompt steps to have a successor trustee appointed satisfying the requirements of the Subordinate Master Resolution if such affiliated Credit Provider and/or Liquidity Provider shall fail at any time to honor a properly presented and conforming draw on the Credit Enhancement and/or Liquidity Facility.

Section 96.09. Purchase Fund. There is hereby established and there shall be maintained with the Trustee a separate fund to be known as the “Purchase Fund.” The Trustee shall further establish separate accounts within the Purchase Fund to be known as the “Liquidity Facility Purchase Account”, the “Remarketing Proceeds Account” and the “District Purchase Account”. At any time at which there is a Liquidity Facility in effect with respect to the 2023E Subordinated Bonds, the Purchase Fund shall be required to be an Eligible Account.

(a) Remarketing Proceeds Account. Upon receipt of the proceeds of a remarketing of a 2023E Subordinated Bond on the date such 2023E Subordinated Bond is to be purchased, the Trustee shall deposit such proceeds in the Remarketing Proceeds Account for application to the Purchase Price of such 2023E Subordinated Bond. Notwithstanding the foregoing, upon the receipt of the proceeds of a remarketing of Liquidity Provider Bonds, the Trustee shall immediately pay such proceeds to the Liquidity Provider to the extent of any amount owing to the Liquidity Provider.

(b) Liquidity Facility Purchase Account. Upon receipt of the immediately available funds pursuant to Section 96.08(b), the Trustee shall deposit such money in the Liquidity Facility Purchase Account for application to the Purchase Price of the 2023E Subordinated Bonds to the extent that the moneys on deposit in the Remarketing Proceeds Account shall not be sufficient. Any amounts deposited in the Liquidity Facility Purchase Account and not needed with respect to the Purchase Price of any 2023E Subordinated Bonds shall be immediately returned to the Liquidity Provider.

(c) District Purchase Account. Upon receipt of funds from the District pursuant to Section 96.04, the Trustee shall deposit such funds in the District Purchase Account for application to the Purchase Price of the 2023E Subordinated Bonds. Any amounts deposited

in the District Purchase Account and not needed with respect to the Purchase Price for any 2023E Subordinated Bonds shall be immediately returned to the District.

(d) Investment. Amounts held in the Liquidity Facility Purchase Account, the Remarketing Proceeds Account and the District Purchase Account by the Trustee shall be held uninvested and separate and apart from all other funds and accounts.

Section 96.10. Inadequate Funds for Tenders.

(a) If moneys sufficient to pay the Purchase Price of all Tendered Bonds to be purchased on any Purchase Date are not available (1) no purchase shall be consummated of Tendered Bonds on such Purchase Date; (2) all Tendered Bonds shall be returned to the Holders thereof; and (3) all remarketing proceeds with respect to the 2023E Subordinated Bonds shall be returned to the Remarketing Agent for return to the Persons providing such moneys. Thereafter, the Trustee shall continue to take all such action available to it to obtain remarketing proceeds with respect to all Tendered Bonds from the Remarketing Agent and sufficient other funds from the Liquidity Provider, if any, or, subject to Section 96.04, the District to effect a subsequent successful remarketing or purchase of any Tendered Bonds.

(b) All Tendered Bonds (other than Liquidity Provider Bonds and 2023E Subordinated Bonds in the Direct Purchase Index Mode) shall bear interest at the Maximum Rate (or such lower interest rate or rates specified in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period) during the period of time from and including the applicable Purchase Date to (but not including) the date that all such Tendered Bonds are successfully remarketed, redeemed, purchased or paid (the “Delayed Remarketing Period”).

(c) The District may direct the conversion of the Tendered Bonds to a different Interest Rate Mode, Index Rate Period or Term Rate Period during the Delayed Remarketing Period in accordance with Section 94.11 hereof; provided that the District shall not be required to comply with the notice requirements described in Section 94.11.

(d) Subject to the terms of the Remarketing Agreement, if any, the Remarketing Agent shall continue to use its best efforts to remarket all of the Tendered Bonds at rates up to and including the Maximum Rate.

(e) During the Delayed Remarketing Period, the Trustee may, upon direction of the District, apply amounts on deposit in the Redemption Fund to the redemption of such Tendered Bonds, as a whole or in part on any Business Day during the Delayed Remarketing Period, at a redemption price equal to the principal amount thereof, together with interest accrued thereon to the date fixed for redemption, without premium. Notwithstanding Section 95.08 to the contrary, the Trustee shall give five Business Days’ notice of such redemption to the Holders of the 2023E Subordinated Bonds to be redeemed.

(f) During the Delayed Remarketing Period, interest on such Tendered Bonds (other than 2023E Subordinated Bonds in the Direct Purchase Index Mode) shall be paid to the Holders thereof (i) on the first Business Day of each calendar month occurring during the Delayed Remarketing Period and (ii) on the last day of the Delayed Remarketing Period.

ARTICLE XCVII

REMARKETING AGENT

Section 97.01. Appointment of Remarketing Agent.

(a) The Remarketing Agent shall be appointed pursuant to the Remarketing Agreement to remarket 2023E Subordinated Bonds pursuant to this Sixteenth Supplemental Resolution and perform the other duties of the Remarketing Agent described hereunder, and to keep such books and records as shall be consistent with prudent industry practice and to make such books and records available for inspection by the District and the Trustee at all reasonable times. The Remarketing Agent shall act as such under the Remarketing Agreement.

(b) The Remarketing Agent may at any time resign and be discharged of the duties and obligations created by this Sixteenth Supplemental Resolution as set forth in the Remarketing Agreement. The Remarketing Agent may suspend its remarketing efforts as set forth in the Remarketing Agreement. The Remarketing Agent may be removed at any time, at the direction of the District as set forth in the Remarketing Agreement. Any successor Remarketing Agent shall be selected by the District, and shall be a member of the Financial Industry Regulatory Authority, or its successors, shall have a capitalization of at least fifteen million dollars (\$15,000,000), shall be authorized by law to perform all the duties set forth in this Sixteenth Supplemental Resolution and shall be acceptable to the Credit Provider and Liquidity Provider. The District's delivery to the Trustee of a certificate setting forth the effective date of the appointment of a successor Remarketing Agent and the name of such successor shall be conclusive evidence that (i) if applicable, the predecessor Remarketing Agent has been removed in accordance with the provisions of this Sixteenth Supplemental Resolution and (ii) such successor has been appointed and is qualified to act as Remarketing Agent under the terms of this Sixteenth Supplemental Resolution.

(c) If the Remarketing Agent consolidates with, merges or converts into, or transfers all or substantially all of its assets (or, in the case of a bank, national banking association or trust company, its corporate assets) to, another corporation, the resulting, surviving or transferee corporation without any further act shall be the successor Remarketing Agent.

ARTICLE XCVIII

MISCELLANEOUS

Section 98.01. 2023E Subordinated Sinking Fund Account; Payments of Interest, Principal and Redemption Price and Defeasance While Credit Enhancement in Effect.

(a) An account is hereby established within the Subordinated Bonds Interest and Principal Fund to be designated the "Series 2023E Sinking Fund Account." The Treasurer shall deposit in the Series 2023E Sinking Fund Account the mandatory sinking fund account payments in the amounts, on the mandatory sinking fund account payment dates, set forth in

Section 95.05(a) and shall transfer such amounts to the Trustee on such date for application as provided in Section 98.01(b).

(b) On each mandatory sinking fund account payment date established for the 2023E Subordinated Bonds, the Trustee shall apply the mandatory sinking fund account payment required on that date to the redemption (or payment at maturity, as the case may be) of the 2023E Subordinated Bonds for which the mandatory sinking fund account payment has been made, upon the notice and in the manner provided in Section 95.08; provided that, at any time prior to giving such notice of such redemption, the Trustee shall, upon direction of the District, apply such moneys to the purchase of such 2023E Subordinated Bonds at public or private sale, as and when and at such prices (including brokerage and other charges, but excluding accrued interest) as the District may direct, except that the purchase price (excluding accrued interest) shall not exceed the par amount of such 2023E Subordinated Bonds. If, during the twelve-month period immediately preceding said mandatory sinking fund account payment date, the Trustee has purchased 2023E Subordinated Bonds with moneys in the Series 2023E Sinking Fund Account, or, during said period and prior to giving said notice of redemption, the District has deposited 2023E Subordinated Bonds with the Trustee, such 2023E Subordinated Bonds so purchased or deposited or redeemed shall be applied, to the extent of the full principal amount thereof, to reduce said mandatory sinking fund account payment. All 2023E Subordinated Bonds purchased or deposited pursuant to this subsection shall be cancelled and destroyed by the Trustee. All 2023E Subordinated Bonds purchased from the Series 2023E Sinking Fund Account or deposited by the District with the Trustee shall be allocated first to the next succeeding mandatory sinking fund account payment, then to the remaining mandatory sinking fund account payments as selected by the District.

(c) Any moneys remaining in the Series 2023E Sinking Fund Account after all 2023E Subordinated Bonds have been retired shall be returned to the District for any lawful District use.

(d) Notwithstanding the foregoing provisions of this Section 98.01 or Section 5.02 or any other provision of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023E Subordinated Bonds, the principal and Redemption Price of, and interest on, the 2023E Subordinated Bonds shall be paid solely (1) first, from moneys obtained from a drawing on the Credit Enhancement pursuant to Section 96.08(a) and (2) second, in the event moneys are not available pursuant to clause (1) for such purpose for any reason, from Available Moneys and moneys on deposit in the Series 2023E Sinking Fund Account shall be withdrawn by the Trustee and used solely for the purpose of reimbursing the Credit Provider for drawings under the Credit Enhancement. To the extent the Credit Provider honors a drawing under the Credit Enhancement for the purpose of paying the principal or Redemption Price of, or interest on, the 2023E Subordinated Bonds, the District shall receive a credit against its obligation to make deposits into the Subordinated Bonds Interest and Principal Fund and shall not be required to transfer funds to the Trustee in the amount of such drawing.

(e) Notwithstanding the provisions of Article X of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023E Subordinated Bonds, 2023E Subordinated

Bonds shall not be deemed defeased or otherwise paid or satisfied unless such 2023E Subordinated Bonds are defeased with (1) moneys obtained from a drawing on the Credit Enhancement pursuant to Section 96.08(a), (2) Available Moneys or (3) Defeasance Securities acquired with moneys described in (1) or (2). Any Defeasance Securities used to defease 2023E Subordinated Bonds for which Credit Enhancement is in effect shall be not callable by the issuer thereof prior to maturity and shall mature no later than the earlier of (x) the first day upon which such 2023E Subordinated Bonds may be tendered or (y) the first day upon which such 2023E Subordinated Bonds may be redeemed. For purpose of Article X of the Subordinate Master Resolution, interest on the 2023E Subordinated Bonds shall be calculated based on an assumed interest rate equal to the Maximum Rate for periods for which the actual interest rate on the 2023E Subordinated Bonds cannot be determined.

Section 98.02. Form and Execution of 2023E Subordinated Bonds. The 2023E Subordinated Bonds, and the certificate of authentication and registration to be executed thereon, shall be in substantially the form set forth as Exhibit A to this Sixteenth Supplemental Resolution.

The 2023E Subordinated Bonds shall be executed in the name and on behalf of the District with the manual or facsimile signature of the President or Vice President of its Board of Directors. The 2023E Subordinated Bonds shall then be delivered to the Trustee for authentication by it. In case any officer who shall have signed any of the 2023E Subordinated Bonds shall cease to be such officer of the District before the 2023E Subordinated Bonds so signed shall have been authenticated or delivered by the Trustee or issued by the District, such 2023E Subordinated Bonds may nevertheless be authenticated, delivered and issued and, upon such authentication, delivery and issue, shall be as binding upon the District as though those who signed the same had continued to be such officer of the District, and also any 2023E Subordinated Bond may be signed on behalf of the District by such person as at the actual date of execution of such 2023E Subordinated Bond shall be the proper officer of the District although at the nominal date of such 2023E Subordinated Bond any such person shall not have been such officer of the District.

Only such of the 2023E Subordinated Bonds as shall bear thereon a certificate of authentication substantially in the form set forth in Exhibit A to this Sixteenth Supplemental Resolution, manually executed by an authorized signatory of the Trustee, shall be valid or obligatory for any purpose or entitled to the benefits of the Subordinate Master Resolution, and such certificate of the Trustee shall be conclusive evidence that the 2023E Subordinated Bonds so authenticated have been duly executed, authenticated and delivered hereunder and are entitled to the benefits of the Subordinate Master Resolution.

Section 98.03. Issuance of 2023E Subordinated Bonds. At any time after the adoption of this Sixteenth Supplemental Resolution, the District may execute and deliver the 2023E Subordinated Bonds in the aggregate principal amount set forth in the Sales Certificate. The Trustee shall authenticate and deliver the 2023E Subordinated Bonds upon written order of the District. The proceeds of the sale of the 2023E Subordinated Bonds shall be deposited and applied as set forth in the Sales Certificate.

Section 98.04. Use of Depository. Notwithstanding any provision of the Subordinate Master Resolution or this Sixteenth Supplemental Resolution to the contrary:

(a) The 2023E Subordinated Bonds shall be initially issued as provided in Section 94.02; provided, that 2023E Subordinated Bonds in the Direct Purchase Index Mode shall be issued in definitive certificated form registered in the name of the Holder thereof or as otherwise directed by the Holder. 2023E Subordinated Bonds in any other Interest Rate Mode shall be registered in the name of Cede & Co. or as otherwise directed by the Securities Depository and registered ownership thereof, or any portion thereof, may not thereafter be transferred except:

(i) To any successor of DTC or its nominee, or to any substitute depository designated pursuant to clause (ii) of this subsection (a) (“substitute depository”); provided that any successor of DTC or substitute depository shall be qualified under any applicable laws to provide the service proposed to be provided by it;

(ii) To any substitute depository not objected to by the Trustee, upon (1) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository or (2) a determination by the District that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; provided that any such substitute depository shall be qualified under any applicable laws to provide the services proposed to be provided by it; or

(iii) To any person as provided below, upon (1) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository; provided that no substitute depository which is not objected to by the Trustee can be obtained or (2) a determination by the District that it is in the best interests of the District to remove DTC or its successor (or any substitute depository or its successor) from its functions as depository.

(b) In the case of any transfer pursuant to clause (i) or clause (ii) of subsection 98.04(a) hereof, upon receipt of all outstanding 2023E Subordinated Bonds by the Trustee, together with a Certificate of the District to the Trustee, a single new 2023E Subordinated Bond shall be executed and delivered for each maturity of 2023E Subordinated Bonds then outstanding registered in the name of such successor or such substitute depository, or their nominees, as the case may be, all as specified in such Certificate of the District. In the case of any transfer pursuant to clause (iii) of subsection 98.04(a) hereof, upon receipt of all outstanding 2023E Subordinated Bonds by the Trustee together with a Certificate of the District to the Trustee, new 2023E Subordinated Bonds shall be executed and delivered in such denominations and registered in the names of such persons as are requested in such a Certificate of the District, subject to the limitations of Section 98.04(a) hereof, provided the Trustee shall not be required to deliver such new 2023E Subordinated Bonds within a period less than 60 days from the date of receipt of such a Certificate of the District. Subsequent to any transfer pursuant to clause (iii) of subsection 98.04(a) hereof, the 2023E Subordinated Bonds shall be transferred as provided in Article II of the Subordinate Master Resolution.

(c) In the case of partial redemption or an advance refunding of the 2023E Subordinated Bonds evidencing all or a portion of the principal maturing in a particular year, DTC shall make an appropriate notation on the 2023E Subordinated Bonds indicating the date and amounts of such reduction in principal. The Trustee shall incur no liability for the failure or any error by DTC in making such notation and the records of the Trustee shall be determinative of the outstanding principal amount of 2023E Subordinated Bonds.

(d) The District and the Trustee shall be entitled to treat the person in whose name any 2023E Subordinated Bond is registered as the Bondholder thereof for all purposes of the Subordinate Master Resolution and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the District; and the District and the Trustee shall have no responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with, any Beneficial Owners of the 2023E Subordinated Bonds. Neither the District nor the Trustee will have any responsibility or obligations, legal or otherwise, to the Beneficial Owners or to any other party including DTC or its successor (or substitute depository or its successor), except for the Holder of any 2023E Subordinated Bond.

(e) During any period that the Outstanding 2023E Subordinated Bonds are registered in the name of Cede & Co. or its registered assigns, the District and the Trustee (to the extent funds are provided to it by the District) shall cooperate with Cede & Co., as sole registered Bondholder, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2023E Subordinated Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made immediately available on the date they are due.

Section 98.05. Tax Covenants.

(a) The District shall at all times do and perform all acts and things permitted by law which are necessary or desirable in order to assure that interest paid on the 2023E Subordinated Bonds (or any of them) will be excluded from gross income for federal income tax purposes and shall take no action that would result in such interest not being excluded from gross income for federal income tax purposes. Without limiting the generality of the foregoing, the District agrees to comply with the provisions of the 2023 Tax Certificate. This covenant shall survive payment in full or defeasance of the 2023E Subordinated Bonds.

(b) Without limiting the generality of the foregoing, the District agrees that there shall be paid from time to time all amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Internal Revenue Code of 1986 (the "Code") and any temporary, proposed or final United States Treasury Regulations as may be applicable to the 2023E Subordinated Bonds from time to time (the "Rebate Requirement"). The District specifically covenants to pay or cause to be paid the Rebate Requirement as provided in the 2023 Tax Certificate to the United States of America from any Net Subordinate Revenues lawfully available to the District. This covenant shall survive payment in full or defeasance of the 2023E Subordinated Bonds. Capitalized terms in this Section not otherwise defined in the Subordinate Master Resolution or this Sixteenth Supplemental Resolution shall have the meanings ascribed to them in the 2023 Tax Certificate.

(c) The District shall establish, maintain and hold in trust a fund separate from any other fund established and maintained hereunder designated the Rebate Fund. The District shall cause to be deposited in the Rebate Fund the Rebate Requirement as provided in the 2023 Tax Certificate. Subject to the provisions of this Section, moneys held in the Rebate Fund are hereby pledged to secure payments to the United States government, and the District and the Bondholders shall have no rights in or claim to such moneys.

(d) In accordance with the 2023 Tax Certificate, the District shall remit part or all of the balance held in the Rebate Fund to the United States government as so directed.

(e) Notwithstanding any provision of this Section, if the District shall obtain an opinion of counsel of recognized national standing in the field of obligations the interest on which is excluded from gross income for purposes of federal income taxation to the effect that any specified action required under this Section is no longer required, or to the effect that some different action is required, to maintain the exclusion from gross income of the interest on the 2023E Subordinated Bonds under Section 103 of the Code, the District may rely conclusively on such opinion in complying with the provisions hereof, and the agreements and covenants hereunder shall be deemed to be modified to that extent without the necessity of an amendment of the Subordinate Master Resolution or this Sixteenth Supplemental Resolution or the consent at any time of the Bondholders.

Section 98.06. Rights of Credit Provider.

(a) Unless a Credit Provider Failure has occurred and is continuing, the Credit Provider shall be deemed the sole Holder of the 2023E Subordinated Bonds for the purpose of directing the Trustee with respect to the exercise of remedies and the declaration or waiver of Events of Default pursuant to Article IX of the Subordinate Resolution.

(b) Unless a Credit Provider Failure has occurred and is continuing, the Subordinate Master Resolution and this Sixteenth Supplemental Resolution shall not be amended without the written consent of the Credit Provider.

(c) Unless a Credit Provider Failure has occurred and is continuing, the District shall not appoint a successor Remarketing Agent or Trustee without the written consent of the Credit Provider.

Section 98.07. Limitations on Rights of Trustee.

(a) Proceeds of drawings on the Credit Enhancement and the Liquidity Facility and moneys on deposit in the Purchase Fund shall be used solely for the purposes set forth herein, and the Trustee shall have no lien on such proceeds or money, nor shall such proceeds or moneys be used for, the payment of the fees and/or expenses of the Trustee.

(b) The Trustee shall draw on the Credit Enhancement and the Liquidity Facility at the times and in the manner provided herein and therein and shall have no right to seek or obtain indemnification from the District, the Holders or any other party as a condition of making any such drawing.

Section 98.08. Terms of 2023E Subordinated Bonds Subject to the Subordinate Master Resolution.

(a) Except as in this Sixteenth Supplemental Resolution expressly provided, every term and condition contained in the Subordinate Master Resolution shall apply to this Sixteenth Supplemental Resolution and to the 2023E Subordinated Bonds with the same force and effect as if the same were herein set forth at length, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Sixteenth Supplemental Resolution.

(b) This Sixteenth Supplemental Resolution and all the terms and provisions herein contained shall form part of the Subordinate Master Resolution as fully and with the same effect as if all such terms and provisions had been set forth in the Subordinate Master Resolution. The Subordinate Master Resolution is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended hereby.

Section 98.09. Resolution of Trust to Remain in Effect. Save and except as supplemented by this Sixteenth Supplemental Resolution, the Subordinate Master Resolution shall remain in full force and effect.

Section 98.10. Notice to Rating Agencies. (a) The District shall provide or cause to be provided prompt notice of the following events to the Rating Agencies, if any:

(1) the expiration, termination, extension or substitution of any Credit Enhancement or Liquidity Facility relating to the 2023E Subordinated Bonds;

(2) any optional redemption (as a whole or in part), mandatory purchase or acceleration of the 2023E Subordinated Bonds;

(3) any Conversion of the 2023E Subordinated Bonds;

(4) any amendment, modification or supplement of or to the Subordinate Master Resolution or any Credit Enhancement or Liquidity Facility relating to the 2023E Subordinated Bonds (which notice shall be provided or caused to be provided at least ten days prior to the effective date thereof);

(5) any change in the party instructed to draw on any Credit Enhancement or Liquidity Facility relating to the 2023E Subordinated Bonds;

(6) any removal or resignation of the Trustee or the Remarketing Agent; or

(7) any legal defeasance of the 2023E Subordinated Bonds.

(b) The District and the Trustee shall provide or cause to be provided to the Rating Agencies any information reasonably requested by such Rating Agency to maintain its rating, if any, on the 2023E Subordinated Bonds.

Section 98.11. Continuing Disclosure. The District hereby covenants and agrees that it will comply with and carry out all of the provisions of any Continuing Disclosure Agreement executed in connection with the 2023E Subordinated Bonds. Notwithstanding any other provision of the Subordinate Master Resolution or this Sixteenth Supplemental Resolution, failure of the District to comply with any such Continuing Disclosure Agreement shall not be considered an Event of Default; however, the Trustee shall, at the written request of any Participating Underwriter (as defined in any such Continuing Disclosure Agreement) or the Holders of at least 25% aggregate principal amount of Outstanding 2023E Subordinated Bonds upon receipt of indemnity satisfactory to the Trustee or any Holder of 2023E Subordinated Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Section. For purposes of this Section, “Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2023E Subordinated Bonds (including persons holding 2023E Subordinated Bonds through nominees, depositories or other intermediaries).

Section 98.12. Designation of Credit Provider and Liquidity Provider Reimbursement Obligations as Parity Subordinated Debt; Authorization and Issuance of Revolving Notes. For the avoidance of doubt, the District hereby designates as Parity Subordinated Debt, secured by the pledge of Net Subordinated Revenues made by the District pursuant to Section 5.01 of the Subordinate Master Resolution on the same basis as the Subordinated Bonds and all other Parity Subordinated Debt as provided in the Subordinate Master Resolution, any and all obligations of the District pursuant to any Credit Enhancement, Liquidity Facility, or Reimbursement Agreement to reimburse each Credit Provider or Liquidity Provider for drawings or other advances on or pursuant to the related Credit Enhancement or Liquidity Facility, including, without limitation, any accrued interest on such drawings or advances, all as set forth in the related Credit Enhancement, Liquidity Facility, or Reimbursement Agreement (collectively, the “Reimbursement Obligations”). In order to more fully evidence the Reimbursement Obligations as Parity Subordinated Debt, the Board hereby authorizes the issuance from time to time of one or more revenue bonds pursuant to the Act in substantially the form of and with the terms stated in the form of the revolving note set forth as Exhibit B to this Sixteenth Supplemental Resolution (each a “Revolving Note”), but the delivery of such Revolving Note shall not be required to secure such Reimbursement Obligations as Parity Subordinated Debt. At the time of each delivery of a Credit Enhancement or Liquidity Facility pursuant to the terms of this Sixteenth Supplemental Resolution, the District may deliver a Revolving Note to the related Credit Provider or Liquidity Provider with a stated amount equal to the Available Amount under such Credit Enhancement or Liquidity Facility and with all blanks and brackets filled in as appropriate and with such other changes as may be necessary or appropriate to conform to the terms of such Credit Enhancement, Liquidity Facility, or Reimbursement Agreement.

Approved: May 18, 2023

INTRODUCED: DIRECTOR ROSE				
SECONDED: DIRECTOR BUI-THOMPSON				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

EXHIBIT A

FORM OF 2023E SUBORDINATED BOND

[TO BE CONFORMED TO SALES CERTIFICATE]

No. R-__ \$ _____

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE BOND
2023 SERIES E**

<u>Maturity</u>	<u>Interest Per Annum</u>	<u>Date</u>	<u>CUSIP</u>
August 15, 20__	Variable	_____, 2023	

REGISTERED OWNER: _____

PRINCIPAL AMOUNT: _____ DOLLARS

SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district duly organized and existing under and pursuant to the laws of the State of California (the “District”), for value received, hereby promises to pay (but only out of the Net Subordinated Revenues hereinafter referred to) to the registered owner named above or registered assigns, on the maturity date specified above, the principal sum specified above together with interest thereon from _____, 2023, until the principal hereof shall have been paid, at the interest rates per annum determined as set forth below, payable on each Interest Payment Date, as defined below. The principal of and premium, if any, and interest on the 2023E Subordinated Bonds, as defined below, shall be payable in lawful money of the United States of America. Interest on the 2023E Subordinated Bonds shall be paid on each Interest Payment Date, as defined below, by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode, by check mailed on the date on which due to the Holders of the 2023E Subordinated Bonds at the close of business on the Record Date for the 2023E Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2023E Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2023E Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2023E Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of \$1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2023E Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2023E Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2023E Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2023E Subordinated Bonds registered in the name of the Securities Depository

(or its nominee), interest on any such 2023E Subordinated Bond shall be payable only upon surrender of such 2023E Subordinated Bond at the office of the Paying Agent. The principal of and premium, if any, on each 2023E Subordinated Bond shall be payable on the Principal Payment Date of such 2023E Subordinated Bond upon surrender thereof at the office of the Paying Agent, subject to the terms of the Sixteenth Supplemental Resolution, as defined below.

This Bond is one of a duly authorized issue of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds (hereinafter called the “Subordinated Bonds”) designated as Subordinated Electric Revenue Bonds, 2023 Series E (the “2023E Subordinated Bonds”). The Subordinated Bonds are not limited in aggregate principal amount, except as otherwise provided in the Subordinate Resolution hereinafter mentioned, and consist or may consist of one or more series of varying denominations, dates, maturities, interest rates and other provisions, as in said Subordinate Resolution provided, all issued and to be issued pursuant to the provisions of the Revenue Bond Law of 1941 as made applicable by Article 6a of Chapter 6, Division 6, of the California Public Utilities Code and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (hereinafter called the “Act”). This 2023E Subordinated Bond is issued pursuant to Resolution No. 85-11-1 of the District, adopted November 7, 1985, providing for the issuance of the Subordinated Bonds, as amended and restated by Resolution No. 01-06-10 of the District, adopted on June 21, 2001 (as amended and restated, the “Subordinate Master Resolution”), and as supplemented and amended by resolutions to date, including by a Sixteenth Supplemental Resolution, adopted May 18, 2023, authorizing the issuance of the 2023E Subordinated Bonds (said resolution as amended, restated and supplemented and the Sixteenth Supplemental Resolution being hereinafter collectively called the “Subordinate Resolution”). Reference is hereby made to the Subordinate Resolution and the Act for a description of the terms on which the Subordinated Bonds are issued and to be issued, the provisions with regard to the nature and extent of the Revenues, as that term is defined in the Subordinate Resolution, and the rights of the registered owners of the Subordinated Bonds; and all the terms of the Subordinate Resolution and the Act are hereby incorporated herein and constitute a contract between the District and the registered owner from time to time of this 2023E Subordinated Bond, and to all the provisions thereof the registered owner of this 2023E Subordinated Bond, by its acceptance hereof, consents and agrees. Additional bonds may be issued on a parity with the Subordinated Bonds of this authorized issue, but only subject to the conditions and limitations contained in the Subordinate Resolution. Capitalized terms used, but not defined herein shall have the meaning given such terms in the Subordinate Resolution.

The Subordinated Bonds and the interest thereon, together with the Parity Subordinated Debt (as defined in the Subordinate Resolution) heretofore or hereafter issued by the District, and the interest thereon, are payable from, and are secured by a charge and lien on, the Net Subordinated Revenues derived by the District from the Electric System (as those terms are defined in the Subordinate Resolution). The District covenants and warrants that for the payment of the Subordinated Bonds, and interest thereon, there have been created and will be maintained by the District special funds into which there shall be deposited from Net Subordinated Revenues available for that purpose sums sufficient to pay the principal of, and interest on, all of the Subordinated Bonds, as such principal and interest become due, and as an irrevocable charge the District has allocated Net Subordinated Revenues to such payment, all in accordance with the Subordinate Resolution.

The Subordinated Bonds, including the 2023E Subordinated Bonds, are expressly subordinated in right of payment to the prior payment in full of all Parity Bonds, as that term is defined in Resolution No. 6649 of the District, adopted on January 7, 1971 (the “Senior Bond Resolution”), including the District’s Electric Revenue Bonds. The holder of this 2023E Subordinated Bond, by acceptance hereof, authorizes and directs the Trustee on its behalf to take such action as may be necessary or appropriate to effectuate the subordination provided in this paragraph and in the Subordinate Resolution and appoints the Trustee its attorney-in-fact for any and all such purposes.

The Subordinated Bonds are special obligations of the District, and are payable, both as to principal and interest, out of the Net Subordinated Revenues pertaining to the Electric System, and not out of any other fund or moneys of the District. No holder of this Bond shall ever have the right to compel any exercise of the taxing power of the District to pay this Bond or the interest hereon.

The term of the 2023E Subordinated Bonds will be divided into consecutive Interest Periods during each of which the 2023E Subordinated Bonds shall bear interest at a Flexible Rate or Flexible Rates, a Daily Rate, a Weekly Rate, a Direct Purchase Index Rate, a Term Rate, an Index Rate or a Fixed Rate or Fixed Rates. The 2023E Subordinated Bonds shall initially bear interest at a Term Rate for an initial Term Rate Period ending on [_____, 20__]. The Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2023E Subordinated Bonds thereafter may be changed from time to time as provided in the Subordinate Resolution. As hereinafter described, the 2023E Subordinated Bonds are subject to mandatory purchase on any Conversion Date.

Interest on the 2023E Subordinated Bonds is to be paid on: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2023E Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2023E Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day specified (a) in the Sales Certificate in connection with the initial issuance of the 2023E Subordinated Bonds or (b) in writing by the District in connection with the Conversion Date to such Term Rate Mode or Fixed Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the applicable Reimbursement Agreement or Liquidity Facility (each an “Interest Payment Date”).

The interest rate on the 2023E Subordinated Bonds shall be determined as follows:

Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and

in Section 94.04 of the Sixteenth Supplemental Resolution, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2023E Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2023E Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2023E Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2023E Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2023E Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2023E Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023E Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period.

During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. The Term Rate shall be the minimum rate which, in

the sole judgment of the Remarketing Agent, would result in a sale of such 2023E Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

Fixed Rates. The Remarketing Agent shall determine the Fixed Rate for 2023E Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2023E Subordinated Bonds will have Serial Maturity Dates in accordance with Section 94.11(b)(v) of the Sixteenth Supplemental Resolution). Except as set forth in Section 94.11(b)(v) of the Sixteenth Supplemental Resolution, the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2023E Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 94.11(b)(v) of the Sixteenth Supplemental Resolution, the Fixed Rate so established shall remain in effect until the Maturity Date of such 2023E Subordinated Bonds.

Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2023E Subordinated Bonds (other than 2023E Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2023E Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2023E Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2023E Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2023E Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2023E Subordinated Bonds.

For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but

excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2023E Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

For 2023E Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2023E Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

Direct Purchase Index Rates.

(a) During each Direct Purchase Index Rate Period, the 2023E Subordinated Bonds shall, subject to subparagraph (b) below, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2023E Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2023E Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2023E Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2023E Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 96.02(b) thereof, but subject to Section 94.04(c) and Section 94.09(b)(ii) and (iii) thereof, from and after any Taxable Date, the interest rate on 2023E Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 96.02(b) thereof, but subject to Section 94.04(c) and Section 94.09(b)(iii) thereof, from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2023E Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2023E Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2023E Subordinated Bonds exceeds the Maximum Rate for such 2023E Subordinated Bonds, then (A) such 2023E Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2023E Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2023E Subordinated Bonds as otherwise calculated pursuant to the above provisions and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2023E Subordinated Bonds as otherwise calculated pursuant to the above provisions is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2023E Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2023E Subordinated Bonds are redeemed or tendered for purchase in accordance with the Sixteenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2023E Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything in the Subordinate Resolution to the contrary, but subject to Section 94.04(c) and Section 94.09(b)(i), (ii) and (iii) thereof, during any Amortization Period, the 2023E Subordinated Bonds shall bear interest at the Bank Rate.

Index Rates. During each Index Rate Period, the 2023E Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2023E Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2023E Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2023E Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2023E Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2023E Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2023E Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2023E Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the District shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect

during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2023E Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2023E Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Optional Tenders of 2023E Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 96.06, the Beneficial Owners of 2023E Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2023E Subordinated Bonds (or portions of those 2023E Subordinated Bonds, provided that no 2023E Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode. The 2023E Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2023E Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2023E Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2023E Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2023E Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

The term “Mandatory Purchase Date” means: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such Flexible Rate Bond, (ii) with respect to 2023E Subordinated Bonds in the Term Rate Mode, the first Business Day following the last day of each Term Rate Period applicable to such 2023E Subordinated Bonds, (iii) with respect to any 2023E Subordinated Bonds, any Conversion Date applicable to such 2023E Subordinated Bond (except for any Conversion Date in respect of a conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode) or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 94.11 not failed to occur (except for any such date in respect of a proposed conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode), (iv) with respect to any 2023E Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2023E Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility supporting such 2023E Subordinated Bonds, (vi) with respect to any 2023E Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility, which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023E Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee’s receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023E Subordinated Bonds and in no event later than the Business Day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2023E Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2023E Subordinated Bonds (other than interest on 2023E Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2023E Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee’s receipt of such notice, (viii) with respect to 2023E Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee’s receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023E Subordinated Bonds, (ix) with respect to 2023E Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2023E Subordinated Bonds, and (x) with respect to 2023E Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Notwithstanding the above paragraphs and anything to the contrary in the Sixteenth Supplemental Resolution, in the event the 2023E Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the

Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2023E Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2023E Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), in which case the 2023E Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2023E Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2023E Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2023E Subordinated Bonds may be subject to redemption or purchase at the sole option of the District at any time without notice as and to the extent provided in the Continuing Covenant Agreement.

Optional Redemption of Flexible Rate Bonds. 2023E Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2023E Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Optional Redemption of 2023E Subordinated Bonds in the Daily Mode or the Weekly Mode. 2023E Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023E Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Optional Redemption of 2023E Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

2023E Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2023E Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2023E Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2023E Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

2023E Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2023E Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2023E Subordinated Bonds so changed to a

Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2023E Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Optional and Mandatory Redemption of 2023E Subordinated Bonds in the Direct Purchase Index Mode.

Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2023E Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023E Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

2023E Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Mandatory Sinking Fund Account Redemption of 2023E Subordinated Bonds. The 2023E Subordinated Bonds [maturing on August 15, 20[___],] shall be subject to redemption prior to maturity from mandatory sinking fund account payments for such 2023E Subordinated Bonds on August 15 of each year on and after August 15, 20__, at a Redemption Price equal to the principal amount of such 2023E Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The following shall be the mandatory sinking fund account payments for the 2023E Subordinated Bonds [maturing on August 15, 20[___]]. Such mandatory sinking fund account payments shall be due on August 15 of the years set forth in the following table in the respective amounts set forth opposite such years in said table:

Year	Amount	Year	Amount
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* Payment at Maturity

Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2023E Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2023E Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023E Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2023E Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2023E Subordinated Bonds to be redeemed, and shall also state that the interest on the 2023E Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023E Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2023E Subordinated Bonds to be redeemed. Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption. Notwithstanding the foregoing, notice of redemption shall not be required for 2023E Subordinated Bonds redeemed on a Mandatory Purchase Date.

This 2023E Subordinated Bond is transferable by the registered owner hereof, in person or by the attorney of such owner duly authorized in writing, at the principal office of the Trustee but only in the manner, subject to the limitations and upon payment of the charges provided in the Subordinate Resolution, and upon surrender and cancellation of this 2023E Subordinated Bond. Upon such transfer a new fully registered Bond or Subordinated Bonds without coupons, of authorized denomination or denominations, for the same aggregate principal amount and maturity will be issued to the transferee in exchange herefor.

The District and the Trustee may deem and treat the registered owner hereof as the absolute owner hereof for all purposes, and the District and the Trustee shall not be affected by any notice to the contrary.

To the extent this 2023E Subordinated Bond constitutes a Liquidity Facility Bond, the terms and conditions of the Sixteenth Supplemental Resolution with respect to Liquidity Facility Bonds shall control this 2023E Subordinated Bond.

The rights and obligations of the District and of the holders and registered owners of the Subordinated Bonds may be modified or amended at any time in the manner, to the extent, and upon the terms provided in the Subordinate Resolution, provided that no such modification or amendment shall (i) extend the fixed maturity of any Subordinated Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce the amount of any premium payable upon the redemption thereof, without the consent of the holder of each Subordinated Bond so affected, or (ii) reduce the percentage of Subordinated Bonds required for the affirmative vote or written consent to an amendment or modification, without the consent of the holders of all the Subordinated Bonds then outstanding, or (iii) without its written consent thereto, modify any of the rights or obligations of the Trustee.

It is hereby certified and recited that any and all acts, conditions and things required to exist, to happen and to be performed, precedent to and in the incurring of the indebtedness evidenced by this 2023E Subordinated Bond, and in the issuing of this 2023E Subordinated Bond, do exist, have happened and have been performed in due time, form and manner, as required by the Constitution and statutes of the State of California, and that this 2023E Subordinated Bond, together with all other indebtedness of the District pertaining to the Electric System, is within every debt and other limit prescribed by the Constitution and the statutes of the State of California, and is not in excess of the amount of Subordinated Bonds permitted to be issued under the Subordinate Resolution.

This 2023E Subordinated Bond shall not be entitled to any benefit under the Subordinate Resolution, or become valid or obligatory for any purpose, until the certificate of authentication hereon endorsed shall have been signed by the Trustee. To the extent of any conflict or inconsistency between any provisions contained in this 2023E Subordinated Bond and the Subordinate Resolution, the provisions of the Subordinate Resolution shall control.

IN WITNESS WHEREOF, SACRAMENTO MUNICIPAL UTILITY DISTRICT has caused this 2023E Subordinated Bond to be executed in its name and on its behalf by the facsimile signature of its President of its Board of Directors and by the facsimile signature of its Treasurer and countersigned by the facsimile signature of its Secretary, and the seal of the District to be reproduced hereon, by facsimile and this 2023E Subordinated Bond to be dated as of the date first written above.

SACRAMENTO MUNICIPAL UTILITY
DISTRICT

By _____
President of the Board of Directors

By _____
Treasurer of the District

(SEAL)

Countersigned:

Secretary of the District

CERTIFICATE OF AUTHENTICATION AND REGISTRATION

This is one of the Subordinated Bonds described in the within-mentioned Subordinate Resolution and registered on the date set forth below.

Dated: _____, 2023

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
as Trustee

By _____
Authorized Officer

ASSIGNMENT

For value received _____ hereby sell, assign and transfer unto _____ whose taxpayer identification number is _____ the within-mentioned Bond and hereby irrevocably constitute and appoint _____ attorney, to transfer the same on the books of the District at the office of the Trustee, with full power of substitution in the premises.

NOTE: The signature to this Assignment must correspond with the name on the face of the within Registered Bond in every particular, without alteration or enlargement or any change whatsoever.

Dated:

Signature Guaranteed by:

NOTE: Signature must be guaranteed by an eligible guarantor institution

EXHIBIT B

FORM OF REVOLVING NOTE

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE BONDS
2023 SERIES E**

[Delivery Date] \$ _____

The Sacramento Municipal Utility District (the “District”), for value received, hereby promises to pay to the order of [Bank] (the “Bank”), pursuant to that certain _____ dated as of _____ (the “Agreement”), between the District and the Bank, at the office of the Bank at _____, the aggregate unpaid principal amount of all Reimbursement Obligations (as defined in the Agreement) pursuant to the Agreement on the dates and in the amounts provided for in the Agreement.

The District promises to pay interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. All payments of principal and interest shall be made in any coin or currency of the United States of America which at the time of payment is legal tender for public and private debts in immediately available funds. All capitalized terms used herein and not otherwise defined herein shall have the meanings specified in the Agreement.

This Revolving Note is a Revolving Note as referred to in Section 98.12 of Resolution No. 01-06-10 of the District adopted June 21, 2001, amending and restating Resolution No. 85-11-1 of the District adopted November 7, 1985, as amended and supplemented, including as supplemented by Resolution No. _____ of the District adopted May 18, 2023 (the “Sixteenth Supplemental Resolution”) (collectively, the “Subordinate Master Resolution”). This Revolving Note evidences the Reimbursement Obligations owed to the Bank by the District pursuant to the Agreement which have been designated by the District as, and constitute, Parity Subordinated Debt under and as defined in the Subordinate Master Resolution and, as such Parity Subordinated Debt, is entitled to the benefits afforded Parity Subordinated Debt and the holders thereof pursuant to the Subordinate Master Resolution and is secured by a lien on the Net Subordinated Revenues as more fully set forth in and subject to the terms of the Subordinate Master Resolution. As provided in the Agreement, the Reimbursement Obligations and this Revolving Note are subject to prepayment, in whole or in part, in accordance with the terms of the Agreement.

The Bank agrees, by acceptance of this Revolving Note, that it will make a notation on the schedule attached hereto of all Reimbursement Obligations evidenced hereby and all principal payments and prepayments made hereunder and of the date to which interest hereon has been paid, all as provided in the Agreement; *provided, however*, that the failure to make any such notation or any error in such notation shall not limit or otherwise affect the obligation of the District hereunder with respect to payments of principal of and interest on this Revolving Note.

This Revolving Note is authorized by the District to be issued to provide for the payment of the principal of and interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. This Revolving Note is issued under and pursuant to and in full compliance with the Subordinate Master Resolution and the Sixteenth Supplemental Resolution.

It is hereby certified that all conditions, acts and things essential to the validity of this Revolving Note exist, have happened and have been done and that every requirement of law affecting the issuance hereof has been duly complied with.

IN WITNESS WHEREOF, SMUD, has caused this Revolving Note to be executed by an authorized officer of SMUD and this Revolving Note to be dated as of date set forth above.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
Name: _____
Title: _____

SCHEDULE FOR REVOLVING NOTE
DATED _____
BY SACRAMENTO MUNICIPAL UTILITY DISTRICT
PAYABLE TO [BANK]

<u>Date</u>	<u>Amount of Drawing or Advance Made</u>	<u>Amount of Principal Paid</u>	<u>Date to Which Interest Paid</u>	<u>Due Date</u>	<u>Notation Made by</u>
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SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. 23-05-10

SEVENTEENTH SUPPLEMENTAL RESOLUTION

AUTHORIZING THE ISSUANCE OF

SUBORDINATED ELECTRIC REVENUE REFUNDING BONDS,
2023 SERIES F

Adopted: May 18, 2023

(Supplemental to Resolution No. 85-11-1 adopted November 7, 1985
as amended and restated by Resolution No. 01-06-10 adopted June 21, 2001)

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RESOLUTION NO. 23-05-10

Seventeenth Supplemental Resolution
(Supplemental to Resolution No. 85-11-1 Adopted November 7, 1985,
as amended and restated by Resolution No. 01-06-10 Adopted June 21, 2001)

Subordinated Electric Revenue Refunding Bonds,
2023 Series F

WHEREAS, the Board of Directors (the “Board”) of the Sacramento Municipal Utility District (the “District”), on November 7, 1985, adopted its Resolution No. 85-11-1 which was amended and restated by Resolution No. 01-06-10, adopted on June 21, 2001, providing for the issuance of the District’s Subordinated Electric Revenue Bonds (as supplemented and amended, herein called the “Subordinate Master Resolution”);

WHEREAS, the Subordinate Master Resolution provides that the District may issue bonds from time to time as the issuance thereof is authorized by the Board by a supplemental resolution;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Subordinate Master Resolution and the Act (as defined in the Subordinate Master Resolution); and

WHEREAS, the District has determined to issue its Subordinated Electric Revenue Refunding Bonds, 2023 Series F (the “2023F Subordinated Bonds”), in the aggregate principal amount determined as set forth in Section 100.02 to (i) refund certain series of the District’s Electric Revenue Bonds and/or Subordinated Electric Revenue Bonds (to be identified in the Sales Certificate) (the “Refunded Bonds”), and (ii) pay costs of issuance (to the extent set forth in the Sales Certificate);

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Sacramento Municipal Utility District, as follows:

ARTICLE XCIX

AUTHORITY AND DEFINITIONS

Section 99.01. Supplemental Resolution. This Seventeenth Supplemental Resolution is supplemental to the Subordinate Master Resolution.

Section 99.02. Definitions; Prevailing Time.

(1) Except as provided by this Seventeenth Supplemental Resolution, all terms which are defined in Section 1.03 of the Subordinate Master Resolution shall have the same meanings in this Seventeenth Supplemental Resolution as such terms are given in said Section 1.03. Unless otherwise provided herein, all references to a particular time are to New York City time. In the event of a conflict between the meanings given in said Section 1.03 and the meanings given in this Section, the meanings given in this Section shall prevail.

(2) In this Seventeenth Supplemental Resolution:

Alternate Credit Enhancement shall mean a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof as a replacement or substitute for any Credit Enhancement then in effect and providing for or supporting the payment of the principal of and interest on the 2023F Subordinated Bonds.

Alternate Liquidity Facility shall mean a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof as a replacement or substitute for any Liquidity Facility then in effect and providing for the payment of the Purchase Price of Tendered Bonds.

Alternate Rate shall mean, on any Rate Determination Date, for any Interest Rate Mode other than a Direct Purchase Index Mode, an Index Mode or a Term Rate Mode, a rate per annum equal to 110% of (a) the SIFMA Municipal Swap Index of Municipal Market Data most recently available as of the date of determination, or (b) if such index is no longer available, or if the SIFMA Municipal Swap Index is no longer published, the S&P Municipal Bond 7 Day High Grade Rate Index, or if neither the SIFMA Municipal Swap Index nor the S&P Municipal Bond 7 Day High Grade Rate Index is published, the index determined to equal the prevailing rate determined by the Remarketing Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Remarketing Agent to be comparable under the circumstances to the criteria used by the Securities Industry and Financial Markets Association to determine the SIFMA Municipal Swap Index just prior to when the Securities and Financial Markets Association stopped publishing the SIFMA Municipal Swap Index. The Trustee shall make the determinations required by this definition, upon notification from the District, if there is no Remarketing Agent, if the Remarketing Agent fails to make any such determination or if the Remarketing Agent has suspended its remarketing efforts in accordance with the Remarketing Agreement.

Amortization End Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Amortization Interest Payment Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Amortization Period shall mean, in the event the 2023F Subordinated Bonds are not purchased or remarketed on any Bank Purchase Date and the other conditions set forth in Section 102.02(b) are satisfied, the period commencing on the Bank Purchase Date and ending on the Amortization End Date.

Amortization Principal Payment Date shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Applicable Factor shall mean, upon any Conversion to a Direct Purchase Index Rate Period, the percentage of the Direct Purchase Index designated in writing by the District as the Applicable Factor for such Direct Purchase Index Rate Period pursuant to Section 100.09(a); provided, however, that the Applicable Factor shall never be less than 65% unless a Favorable

Opinion of Bond Counsel is delivered in connection with the Conversion to such Direct Purchase Index Rate Period.

Applicable Spread shall mean, with respect to any Direct Purchase Index Rate Period, the number of basis points determined by the Market Agent on or before the first day of such Direct Purchase Index Rate Period and designated by the District in accordance with Section 100.09(a) (which may include a schedule for the Applicable Spread based upon the ratings assigned to any indebtedness of the District) that, when added to the product of the Direct Purchase Index multiplied by the Applicable Factor, would equal the minimum interest rate per annum that would enable the 2023F Subordinated Bonds to be sold on such date at a price equal to the principal amount thereof (without regard to accrued interest, if any, thereon).

Authorized Denominations shall mean (i) with respect to 2023F Subordinated Bonds in a Daily Mode or Weekly Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof, (ii) with respect to 2023F Subordinated Bonds in a Flexible Mode, \$100,000 and any integral multiple of \$1,000 in excess thereof; (iii) with respect to 2023F Subordinated Bonds in a Direct Purchase Index Mode or Index Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof; and (iv) with respect to 2023F Subordinated Bonds in a Term Rate Mode or a Fixed Rate Mode, \$5,000 and any integral multiple thereof.

Available Amount shall mean the amount available under a Credit Enhancement or Liquidity Facility, as applicable, to pay the principal of and interest on the 2023F Subordinated Bonds or the Purchase Price of the 2023F Subordinated Bonds, as applicable.

Available Moneys shall mean (a) if a Credit Enhancement is in effect, (i) moneys drawn under the Credit Enhancement which at all times since their receipt by the Trustee were held in a separate segregated account or accounts or subaccount or subaccounts in which no moneys (other than those drawn under the Credit Enhancement) were at any time held, (ii) moneys which have been paid to the Trustee and have been on deposit with the Trustee for at least 124 days (or, if paid to the Trustee by an “affiliate,” as defined in Bankruptcy Code §101(2), of the District, 366 days) during and prior to which no Event of Bankruptcy shall have occurred, (iii) any other moneys, if, in the opinion of nationally recognized counsel experienced in bankruptcy matters (which opinion shall be acceptable to each Rating Agency then rating the 2023F Subordinated Bonds), the application of such moneys will not constitute a voidable preference in the event of the occurrence of an Event of Bankruptcy, and (iv) investment earnings on any of the moneys described in clauses (i), (ii) and (iii) of this definition; and (b) if a Credit Enhancement is not in effect, “Available Moneys” means any moneys deposited with the Trustee.

Bank shall mean, while the 2023F Subordinated Bonds are in a Direct Purchase Index Mode, the Holder of the 2023F Subordinated Bonds, provided that there is a single Holder of all of the 2023F Subordinated Bonds and provided further that the 2023F Subordinated Bonds are not then held under the book-entry system of a Securities Depository. If there is more than one Holder of the 2023F Subordinated Bonds while the 2023F Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Holders owning a majority of the aggregate principal amount of the 2023F Subordinated Bonds then Outstanding. If the 2023F Subordinated Bonds are held under the book-entry system of a Securities Depository during any Direct

Purchase Index Mode, “Bank” means the Beneficial Owner of the 2023F Subordinated Bonds, provided that there is a single Beneficial Owner of all of the 2023F Subordinated Bonds. If there is more than one Beneficial Owner of the 2023F Subordinated Bonds while the 2023F Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Beneficial Owners who are the beneficial owners of a majority of the aggregate principal amount of the 2023F Subordinated Bonds then Outstanding.

Bank Purchase Date shall mean, during any Direct Purchase Index Rate Period, (i) the date designated by the District pursuant to Section 100.11(a) and (ii) the date which is five Business Days after the date on which the Trustee receives written notice from the Bank under a Continuing Covenant Agreement which (x) advises the Trustee of the occurrence and continuance of an “Event of Default” under and as defined in such Continuing Covenant Agreement and (y) directs the Trustee to cause a mandatory tender for purchase of the 2023F Subordinated Bonds by reason of such “Event of Default.”

Bank Rate shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Bankruptcy Code means Title 11 of the United States Code, as amended, and any successor statute.

Beneficial Owner shall mean, so long as the 2023F Subordinated Bonds are held in the Book-Entry System, any Person who acquires a beneficial ownership interest in a 2023F Subordinated Bond held by the Securities Depository. If at any time the 2023F Subordinated Bonds are not held in the Book-Entry System, Beneficial Owner shall mean Holder for purposes of the Subordinate Master Resolution.

Bond Counsel shall mean any firm of nationally recognized municipal bond attorneys selected by the District and experienced in the issuance of municipal bonds and matters relating to the exclusion of the interest thereon from gross income for federal income tax purposes.

Book-Entry System shall mean the system maintained by the Securities Depository.

Business Day shall mean any day other than (i) a Saturday or Sunday or (ii) a day on which banks located in (a) the State of California or the State of New York, (b) the city or cities in which the principal office of the Trustee, the Paying Agent, the Remarketing Agent, if any, the Bank, if any, or the Calculation Agent, if any, are located, or (c) the city or cities in which the office of the Credit Provider or Liquidity Provider at which it will pay draws or advances is located, are required or authorized to remain closed, (iii) a day on which The New York Stock Exchange or Federal Reserve Bank is closed or (iv) a day on which the principal offices of the Credit Provider or Liquidity Provider are closed.

Calculation Agent shall mean, (i) during any Direct Purchase Index Rate Period, the Bank or any other party appointed by the District with the consent of the Bank so long as the Bank owns a majority in aggregate principal amount of the 2023F Subordinated Bonds and (ii)

during any Index Rate Period, the Trustee or any other party appointed by the District to act as calculation agent for the 2023F Subordinated Bonds.

Call Protection Date shall mean (i) with respect to the initial issuance of the 2023F Subordinated Bonds, if applicable, the date specified in the Sales Certificate as the Call Protection Date and (ii) with respect to any conversion to a Term Rate Period or Index Rate Period, the date specified by the District in writing as the Call Protection Date for such Term Rate Period or Index Rate Period on or before the first day of such Term Rate Period or Index Rate Period.

Code shall mean the Internal Revenue Code of 1986, as amended.

Continuing Covenant Agreement shall mean, during any Direct Purchase Index Rate Period, any agreement between the District and the Bank which may be designated as the Continuing Covenant Agreement.

Conversion Date shall mean, with respect to the 2023F Subordinated Bonds in a particular Interest Rate Mode, the day on which another Interest Rate Mode for the 2023F Subordinated Bonds begins, with respect to the 2023F Subordinated Bonds in a Term Rate Mode, the day on which a new Term Rate Period begins, with respect to 2023F Subordinated Bonds in a Direct Purchase Index Mode, the day on which a new Direct Purchase Index Rate Period begins, and with respect to 2023F Subordinated Bonds in an Index Mode, the day on which a new Index Rate Period begins.

Conversion Notice shall mean the notice from the District to the other Notice Parties pursuant to Section 100.11(a)(i).

Credit Enhancement shall mean, with respect to the 2023F Subordinated Bonds, a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof and then in effect and providing for or supporting the payment of the principal of and interest on the 2023F Subordinated Bonds and, upon replacement of any such Credit Enhancement with an Alternate Credit Enhancement, the Alternate Credit Enhancement then in effect.

Credit Provider shall mean, with respect to the 2023F Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Credit Enhancement, if any, then in effect for the 2023F Subordinated Bonds.

Credit Provider Failure or Liquidity Provider Failure shall mean a failure of a Credit Provider or Liquidity Provider, as applicable, to pay a properly presented and strictly conforming draw or request for advance under a Credit Enhancement or Liquidity Facility, as applicable, or the filing or commencement of any bankruptcy or insolvency proceedings by or against a Credit Provider or Liquidity Provider, as applicable, or a Credit Provider or Liquidity Provider, as applicable, shall declare a moratorium on the payment of its unsecured debt obligations or shall repudiate a Credit Enhancement or Liquidity Facility, as applicable.

Current Mode shall have the meaning specified in Section 100.11(a).

Daily Mode shall mean the Interest Rate Mode during which the 2023F Subordinated Bonds bear interest at the Daily Rate.

Daily Rate shall mean the per annum interest rate on any 2023F Subordinated Bond in the Daily Mode determined pursuant to Section 100.06(a).

Daily Rate Period shall mean the period during which a 2023F Subordinated Bond in the Daily Mode shall bear a Daily Rate, which shall be from the Business Day upon which a Daily Rate is set to but not including the next succeeding Business Day.

Default Rate shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Delayed Remarketing Period shall have the meaning specified in Section 102.10(b) hereof.

Determination of Taxability shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Direct Purchase Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Market Agent.

Direct Purchase Index Mode shall mean the Interest Rate Mode during which the 2023F Subordinated Bonds bear interest at a Direct Purchase Index Rate.

Direct Purchase Index Rate shall mean the per annum interest rate on any 2023F Subordinated Bond in the Direct Purchase Index Mode determined in accordance with Section 100.09, being the Direct Purchase Index Rate, the Taxable Rate, the Default Rate or the Bank Rate, as applicable.

Direct Purchase Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

Direct Purchase Index Rate Effective Period shall mean, during any Direct Purchase Index Rate Period, the period from and including the first day of such Direct Purchase Index Rate Period to but excluding the next succeeding Direct Purchase Index Rate Reset Date and, thereafter, means each Direct Purchase Index Rate Reset Date to but excluding the next succeeding Direct Purchase Index Rate Reset Date.

Direct Purchase Index Rate Period shall mean the period from (and including) the date on which the 2023F Subordinated Bonds begin to bear interest in the Direct Purchase Index Mode to (but excluding) the earliest to occur of (i) the immediately succeeding Bank Purchase Date, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of the 2023F Subordinated Bonds have been redeemed or defeased in full and (iv) the Maturity Date.

Direct Purchase Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

District Purchase Account shall mean the account by that name in the Purchase Fund created in Section 102.09.

Electronic Means shall mean telecopy, facsimile transmission, e-mail transmission or other similar electronic means of communication providing evidence of transmission, including a telephonic communication confirmed by any other method set forth in this definition.

Eligible Account shall mean an account that is either (a) maintained with a federal or state-chartered depository institution or trust company that has a Standard & Poor's short-term debt rating of at least 'A-2' (or, if no short-term debt rating, a long-term debt rating of 'BBB+'); or (b) maintained with the corporate trust department of a federal depository institution or state-chartered depository institution subject to regulations regarding fiduciary funds on deposit similar to Title 12 of the U.S. Code of Federal Regulation Section 9.10(b), which, in either case, has corporate trust powers and is acting in its fiduciary capacity. In the event that a fund or account required to be an "Eligible Account" no longer complies with the requirements listed above, the Trustee shall promptly (and, in any case, within not more than 30 calendar days) move such fund or account to another financial institution such that the Eligible Account requirements stated above will again be satisfied.

Event of Bankruptcy shall mean any of the following events:

(i) the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2023F Subordinated Bonds, or an "affiliate" of the District as defined in Bankruptcy Code § 101(2)) shall (a) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator or the like of the District (or such other Person) or of all or any substantial part of their respective property, (b) commence a voluntary case under the Bankruptcy Code, or (c) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts; or

(ii) a proceeding or case shall be commenced, without the application or consent of the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2023F Subordinated Bonds, or an "affiliate" of the District as defined in Bankruptcy Code § 101(2)) in any court of competent jurisdiction, seeking (a) the liquidation, reorganization, dissolution, winding-up, or composition or adjustment of debts, of the District (or any such other Person), (b) the appointment of a trustee, receiver, custodian, liquidator or the like of the District (or any such other Person) or of all or any substantial part of their respective property, or (c) similar relief in respect of the District (or any such other Person) under any law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts.

Event of Taxability shall have the meaning assigned to such term in the Continuing Covenant Agreement.

Expiration Date shall mean the stated expiration date of a Credit Enhancement or a Liquidity Facility, as it may be extended from time to time as provided in the Credit Enhancement or the Liquidity Facility, or any earlier date on which a Credit Enhancement or a Liquidity Facility shall terminate at the direction of the District.

Favorable Opinion of Bond Counsel shall mean, with respect to any action the occurrence of which requires such an opinion, an Opinion of Counsel, which shall be a Bond Counsel, to the effect that such action is permitted under the Subordinate Master Resolution and will not, in and of itself, cause interest on the 2023F Subordinated Bonds to be included in gross income for purposes of federal income taxation.

Fitch shall mean Fitch, Inc., and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “Fitch” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

Fixed Rate shall mean the per annum interest rate on any 2023F Subordinated Bond in the Fixed Rate Mode determined pursuant to Section 100.07(b).

Fixed Rate Bond shall mean a 2023F Subordinated Bond in the Fixed Rate Mode.

Fixed Rate Mode shall mean the Interest Rate Mode during which the 2023F Subordinated Bonds bear interest at the Fixed Rate.

Fixed Rate Period shall mean the period from the Conversion Date upon which the 2023F Subordinated Bonds were converted to the Fixed Rate Mode to but not including the Maturity Date for the 2023F Subordinated Bonds.

Flexible Mode shall mean the Interest Rate Mode during which the 2023F Subordinated Bonds bear interest at Flexible Rates.

Flexible Rate shall mean the per annum interest rate on a Flexible Rate Bond determined for such Flexible Rate Bond pursuant to Section 100.05. The Flexible Rate Bonds may bear interest at different Flexible Rates.

Flexible Rate Bond shall mean a 2023F Subordinated Bond in the Flexible Mode.

Flexible Rate Period shall mean the period of from one to 270 calendar days (which period must end on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date) during which a Flexible Rate Bond shall bear interest at a Flexible Rate, as established by the Remarketing Agent pursuant to Section 100.05. The Flexible Rate Bonds may be in different Flexible Rate Periods.

Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Remarketing Agent.

Index Mode shall mean the Interest Rate Mode during which the 2023F Subordinated Bonds bear interest at an Index Rate.

Index Rate shall mean the per annum interest rate on any 2023F Subordinated Bond in the Index Mode determined in accordance with Section 100.10.

Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Rate Effective Period shall mean, during any Index Rate Period, the period from and including the first day of such Index Rate Period through and including the day immediately preceding the next succeeding Index Rate Reset Date and, thereafter, means each Index Rate Reset Date through and including the day immediately preceding the next succeeding Index Rate Reset Date.

Index Rate Period shall mean the period from (and including) the date on which the 2023F Subordinated Bonds begin to bear interest in the Index Mode to (but excluding) the earliest to occur of (i) the Business Day immediately succeeding the last day thereof, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of the 2023F Subordinated Bonds have been redeemed or defeased in full and (iv) the final Maturity Date.

Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Percentage shall mean, upon any conversion to an Index Rate Period, the percentage of the Index determined by the Remarketing Agent in accordance with Section 100.10; provided, however, that the Index Percentage shall never be less than 65% unless a Favorable Opinion of Bond Counsel is delivered on or before the determination of the Index Percentage by the Remarketing Agent.

Index Spread shall mean, upon any conversion to an Index Rate Period, the fixed per annum rate determined by the Remarketing Agent in accordance with Section 100.10.

Interest Accrual Period shall mean the period during which a 2023F Subordinated Bond accrues interest payable on the next Interest Payment Date applicable thereto. Each Interest Accrual Period for 2023F Subordinated Bonds shall be the period commencing on (and including) the last Interest Payment Date to which interest has been paid (or, if no interest has been paid in such Interest Rate Mode, commencing on (and including) the date of original authentication and delivery of the 2023F Subordinated Bonds, or the Conversion Date, as the case may be) to (and excluding) the Interest Payment Date on which interest is to be paid. If, at the time of authentication of any 2023F Subordinated Bond, interest is in default or

overdue on the 2023F Subordinated Bonds, such 2023F Subordinated Bond shall bear interest from the date to which interest has previously been paid in full or made available for payment in full on Outstanding 2023F Subordinated Bonds.

Interest Payment Date shall mean each date on which interest is to be paid and is: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2023F Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2023F Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day specified (a) in the Sales Certificate in connection with the initial issuance of the 2023F Subordinated Bonds or (b) in writing by the District in connection with the Conversion Date to such Term Rate Mode or Fixed Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the applicable Reimbursement Agreement or Liquidity Facility.

Interest Period shall mean, for 2023F Subordinated Bonds in a particular Interest Rate Mode, the period of time that such 2023F Subordinated Bonds bear interest at the rate (per annum) which becomes effective at the beginning of such period, and shall include a Flexible Rate Period, a Daily Rate Period, a Weekly Rate Period, a Direct Purchase Index Rate Effective Period, an Index Rate Effective Period, a Term Rate Period and a Fixed Rate Period.

Interest Rate Mode shall mean, as the context may require, the Flexible Mode, the Daily Mode, the Weekly Mode, the Direct Purchase Index Mode, the Index Mode, the Term Rate Mode or the Fixed Rate Mode.

Liquidity Facility shall mean, with respect to the 2023F Subordinated Bonds, a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof and then in effect and providing for the payment of the Purchase Price of Tendered Bonds and upon replacement of such Liquidity Facility with an Alternate Liquidity Facility, the Alternate Liquidity Facility then in effect.

Liquidity Facility Purchase Account shall mean the account by that name in the Purchase Fund created by Section 102.09.

Liquidity Provider shall mean, with respect to the 2023F Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Liquidity Facility, if any, then in effect for the 2023F Subordinated Bonds.

Liquidity Provider Bonds shall mean any 2023F Subordinated Bonds purchased by the Liquidity Provider with funds drawn on or advanced under the Liquidity Facility or Credit Enhancement, as applicable.

Long-Term Mode shall mean a Term Rate Mode or a Fixed Rate Mode.

Mandatory Purchase Date shall mean: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such

Flexible Rate Bond, (ii) with respect to 2023F Subordinated Bonds in the Term Rate Mode, the first Business Day following the last day of each Term Rate Period applicable to such 2023F Subordinated Bonds, (iii) with respect to any 2023F Subordinated Bonds, any Conversion Date applicable to such 2023F Subordinated Bond (except, unless otherwise specified in writing by the District in connection with a conversion of the Interest Rate Mode to the Daily Mode or the Weekly Mode, any Conversion Date in respect of a conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode) or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 100.11 not failed to occur (except, unless otherwise specified in writing by the District in connection with a conversion of the Interest Rate Mode to the Daily Mode or the Weekly Mode, any such date in respect of a proposed conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode), (iv) with respect to any 2023F Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2023F Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility supporting such 2023F Subordinated Bonds, (vi) with respect to any 2023F Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility, which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023F Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee's receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023F Subordinated Bonds and in no event later than the Business Day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2023F Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2023F Subordinated Bonds (other than interest on 2023F Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2023F Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee's receipt of such notice, (viii) with respect to 2023F Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee's receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023F Subordinated Bonds, (ix) with respect to 2023F Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2023F Subordinated Bonds, and (x) with respect to 2023F Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Market Agent shall mean the Person appointed by the District to serve as market agent in connection with a conversion to any Direct Purchase Index Rate Period.

Maturity Date shall mean the maturity date or maturity dates of the 2023F Subordinated Bonds set forth in the Sales Certificate, or, if established pursuant to Section 100.11(b)(v) upon a change to the Fixed Rate Mode, the Serial Maturity Dates.

Maximum Rate shall mean (i) with respect to Liquidity Provider Bonds and 2023F Subordinated Bonds in the Direct Purchase Index Mode, a rate of interest per annum not exceeding the maximum non-usurious lawful rate of interest permitted by applicable laws and (ii) with respect to all other 2023F Subordinated Bonds, a rate of interest of twelve percent (12%) per annum unless a lesser rate of interest is specified as the Maximum Rate in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period.

Moody's shall mean Moody's Investors Service and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

New Mode shall have the meaning specified in Section 100.11(a).

Notice Parties shall mean the Trustee, the Remarketing Agent, if any, the Paying Agent, the Credit Provider, if any, the Liquidity Provider, if any, the Bank, if any, the Market Agent, if any, and the Calculation Agent, if any.

Opinion of Counsel shall mean a written legal opinion from a firm of attorneys experienced in the matters to be covered in the opinion.

Outstanding, when used with reference to 2023F Subordinated Bonds, shall mean, as of any date, 2023F Subordinated Bonds theretofore or thereupon being authenticated and delivered under this Seventeenth Supplemental Resolution except:

(i) 2023F Subordinated Bonds cancelled by the Trustee, or delivered to the Trustee for cancellation, at or prior to such date;

(ii) 2023F Subordinated Bonds paid or deemed paid pursuant to Section 10.01 of the Subordinate Master Resolution; and

(iii) 2023F Subordinated Bonds in lieu of or in substitution for which other 2023F Subordinated Bonds shall have been authenticated and delivered pursuant to this Seventeenth Supplemental Resolution.

Person shall mean an individual, a corporation, a partnership, an association, a joint venture, a trust, an unincorporated organization or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

Principal Payment Date shall mean any date upon which the principal amount of 2023F Subordinated Bonds is due under the Subordinate Master Resolution, including any Maturity Date, any Serial Maturity Date, any Redemption Date, or the date the maturity of any

2023F Subordinated Bond is accelerated pursuant to the terms of the Subordinate Master Resolution.

Purchase Date shall mean (i) for a 2023F Subordinated Bond in the Daily Mode or the Weekly Mode, any Business Day selected by the Beneficial Owner of said 2023F Subordinated Bond pursuant to the provisions of Section 102.01, and (ii) any Mandatory Purchase Date.

Purchase Fund shall mean the fund by that name created in Section 102.09.

Purchase Price shall mean an amount equal to the principal amount of any 2023F Subordinated Bonds purchased on any Purchase Date, plus accrued interest to but excluding the Purchase Date; provided, however, that (i) if the Purchase Date for any 2023F Subordinated Bond to be purchased is an Interest Payment Date for such 2023F Subordinated Bond, the Purchase Price thereof shall be the principal amount thereof, and interest on such 2023F Subordinated Bond shall be paid to the Holder of such 2023F Subordinated Bond pursuant to the Subordinate Master Resolution and this Seventeenth Supplemental Resolution and (ii) in the case of a purchase on a Conversion Date or proposed Conversion Date which is preceded by a Term Rate Period or an Index Rate Period and which occurs prior to the day originally established as the last day of such preceding Term Rate Period or Index Rate Period, the Purchase Price of any 2023F Subordinated Bond to be purchased on such Conversion Date shall be the Redemption Price which would have been applicable to such 2023F Subordinated Bond if the preceding Term Rate Period or Index Rate Period had continued to the day originally established as its last day, plus accrued interest, if any.

Rate Determination Date shall mean any date on which the interest rate on 2023F Subordinated Bonds shall be determined, which, (i) in the case of the Flexible Mode, shall be the first day of an Interest Period; (ii) in the case of the Daily Mode, shall be each Business Day commencing with the first day (which must be a Business Day) the 2023F Subordinated Bonds become subject to the Daily Mode; (iii) in the case of the Weekly Mode, shall be (A) each Wednesday or, if Wednesday is not a Business Day, then the Business Day next succeeding such Wednesday, and (B) not later than the Business Day preceding a Conversion Date, a Substitution Date or a Mandatory Purchase Date specified in clause (viii) of the definition of Mandatory Purchase Date; (iv) in the case of the Term Rate Mode, shall be a Business Day no later than the Business Day next preceding the first day of an Interest Period, as determined by the Remarketing Agent; (v) in the case of the Direct Purchase Index Mode, each Direct Purchase Index Rate Determination Date; (vi) in the case of the Index Mode, each Index Rate Determination Date, and (vii) in the case of the Fixed Rate Mode, shall be a date determined by the Remarketing Agent which shall be at least one Business Day prior to the Conversion Date.

Rating Agencies shall mean any of Moody's, S&P or Fitch, which is then providing a rating on the 2023F Subordinated Bonds at the request of the District.

Record Date shall mean (i) with respect to 2023F Subordinated Bonds in a Daily Mode, Weekly Mode, Flexible Mode, Direct Purchase Index Mode or Index Mode, the last Business Day before an Interest Payment Date, and (ii) with respect to 2023F Subordinated

Bonds in a Term Rate Mode or Fixed Rate Mode, the fifteenth (15th) day (whether or not a Business Day) next preceding each Interest Payment Date.

Redemption Date shall mean the date fixed for redemption of 2023F Subordinated Bonds subject to redemption in any notice of redemption given in accordance with the terms of the Subordinate Master Resolution.

Redemption Price shall mean an amount equal to the principal of and premium, if any, and accrued interest, if any, on the 2023F Subordinated Bonds to be paid on the Redemption Date.

Reimbursement Agreement shall mean any reimbursement agreement, credit agreement, line of credit agreement, standby purchase agreement or other agreement by and between a Credit Provider or Liquidity Provider, as applicable, and the District.

Remarketing Agent shall mean any investment banking firm which may be appointed with respect to the 2023F Subordinated Bonds pursuant to Section 103.01.

Remarketing Agreement shall mean any agreement relating to the 2023F Subordinated Bonds by and between the District and a Remarketing Agent, as it may be amended or supplemented from time to time in accordance with its terms.

Remarketing Proceeds Account shall mean the account by that name in the Purchase Fund created in Section 102.09.

Representations Letter shall mean the Letter of Representations from the District to the Securities Depository in connection with the 2023F Subordinated Bonds in a book-entry system, as supplemented and amended from time to time.

Sales Certificate shall mean a written certificate of the District executed by the Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District or the designee of any of them prior to the issuance of the 2023F Subordinated Bonds setting forth the principal amount, Maturity Date or Maturity Dates, initial Interest Rate Mode, initial interest rate or rates, and such other matters with respect to the 2023F Subordinated Bonds as such officer may deem appropriate, as provided in Section 100.02.

S&P shall mean S&P Global Ratings and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “S&P” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent, if any.

S&P Municipal Bond 7 Day High Grade Rate Index shall mean for a Rate Determination Date, the level of the “S&P Municipal Bond 7 Day High Grade Rate Index” (formerly known as the J.J. Kenny Index) maintained by Standard and Poor’s for a one-week maturity as published each day.

Securities Depository shall mean The Depository Trust Company, and such other securities depository as the District may designate in a certificate of the District delivered to the Trustee.

Serial Bonds shall mean the 2023F Subordinated Bonds maturing on the Serial Maturity Dates, as determined pursuant to Section 100.11(b).

Serial Maturity Dates shall mean the dates on which the Serial Bonds mature, as determined pursuant to Section 100.11(b).

Serial Payments shall mean the payments to be made in payment of the principal of the Serial Bonds on the Serial Maturity Dates.

Short-Term Mode shall mean the Daily Mode, the Weekly Mode or the Flexible Mode.

SIFMA Index shall mean, for any applicable Rate Determination Date, the level of the index which is issued weekly and which is compiled from the weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meet specific criteria established from time to time by SIFMA and issued on Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day. If the SIFMA Index is no longer published, then "SIFMA Index" shall mean the S&P Municipal Bond 7 Day High Grade Rate Index. If the S&P Municipal Bond 7 Day High Grade Rate Index is no longer published, then "SIFMA Index" shall mean the prevailing rate determined by the Calculation Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Calculation Agent to be comparable under the circumstances to the criteria used by SIFMA to determine the SIFMA Index immediately prior to the date on which SIFMA ceased publication of the SIFMA Index. Notwithstanding the foregoing, if the SIFMA Index as determined as provided above would be less than 0.0%, then the SIFMA Index will be deemed to be 0.0%.

Substitution Date shall mean the date upon which an Alternate Credit Enhancement or Alternate Liquidity Facility is scheduled to be substituted for a Credit Enhancement or Liquidity Facility then in effect.

Taxable Date shall mean the date on which interest on the 2023F Subordinated Bonds is first includable in gross income of the Holder (including, without limitation, any previous Holder) thereof as a result of an Event of Taxability as such a date is established pursuant to a Determination of Taxability.

Taxable Rate shall mean an interest rate per annum at all times equal to the product of the Direct Purchase Index Rate then in effect multiplied by the Taxable Rate Factor.

Taxable Rate Factor shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Tendered Bonds shall mean 2023F Subordinated Bonds tendered for purchase by the Holders or Beneficial Owners thereof pursuant to Section 102.01 or subject to mandatory tender for purchase on a Mandatory Purchase Date pursuant to Section 102.02.

Tender Notice shall mean a notice delivered by Electronic Means or in writing with respect to a 2023F Subordinated Bond that states (i) the principal amount of such 2023F Subordinated Bond to be purchased pursuant to Section 102.01, (ii) the Purchase Date on which such 2023F Subordinated Bond is to be purchased, (iii) applicable payment instructions with respect to the 2023F Subordinated Bonds being tendered for purchase and (iv) an irrevocable demand for such purchase.

Tender Notice Deadline with respect to a 2023F Subordinated Bond shall mean (i) during a Daily Mode with respect to such 2023F Subordinated Bond, 11:00 a.m. on any Business Day and (ii) during a Weekly Mode with respect to such 2023F Subordinated Bond, 5:00 p.m. on a Business Day not less than seven days prior to the applicable Purchase Date.

Term Rate shall mean the per annum interest rate for 2023F Subordinated Bonds in the Term Rate Mode determined pursuant to Section 100.07(a).

Term Rate Mode shall mean the Interest Rate Mode during which the 2023F Subordinated Bonds bear interest at the Term Rate.

Term Rate Period shall mean the period from (and including) the date on which the 2023F Subordinated Bonds begin to bear interest in a Term Rate Mode to (but excluding) the commencement date of the next succeeding Interest Period, including another Term Rate Period.

2023 Tax Certificate shall mean the Tax Certificate executed and delivered by the District in connection with the issuance of the 2023F Subordinated Bonds, as amended or supplemented from time to time in accordance with its terms.

Weekly Mode shall mean the Interest Rate Mode during which the 2023F Subordinated Bonds bear interest at the Weekly Rate.

Weekly Rate shall mean the per annum interest rate on 2023F Subordinated Bonds in the Weekly Mode determined pursuant to Section 100.06(b).

Weekly Rate Period shall mean the period during which a 2023F Subordinated Bond in the Weekly Mode shall bear a Weekly Rate, which shall be the period commencing on Thursday of each week to and including Wednesday of the following week, except (i) the first Weekly Rate Period, which shall be from the Conversion Date on which the Interest Rate Mode for the 2023F Subordinated Bonds is changed to a Weekly Mode to and including the Wednesday of the following week, and (ii) the last Weekly Rate Period which shall end on the day preceding the earliest to occur of the Conversion Date on which the Interest Rate Mode for the 2023F Subordinated Bonds is changed from the Weekly Mode to a different Interest Rate Mode, the Maturity Date or the Mandatory Purchase Date for such 2023F Subordinated Bond.

ARTICLE C

THE 2023F SUBORDINATED BONDS

Section 100.01. Authorization and Purpose of 2023F Subordinated Bonds.

The Board hereby authorizes the issuance of a series of revenue bonds of the District in accordance with the Subordinate Master Resolution, designated as “Subordinated Electric Revenue Refunding Bonds, 2023 Series F” (the “2023F Subordinated Bonds”) for the purpose of (i) refunding the Refunded Bonds, and (ii) paying costs of issuance (to the extent set forth in the Sales Certificate).

Section 100.02. Terms, Registration, Denominations, Medium, Method and Place of Payment and Dating of 2023F Subordinated Bonds.

(a) The 2023F Subordinated Bonds shall be issued in the aggregate principal amount which, together with the aggregate principal amount, if any, of the District’s Electric Revenue Bonds sold and issued pursuant to the District’s Sixty-Sixth Supplemental Resolution adopted on the date hereof, Subordinated Electric Revenue Refunding Bonds, 2023 Series C, Subordinated Electric Revenue Bonds, 2023 Series D, and Subordinated Electric Revenue Bonds, 2023 Series E, shall not exceed \$630,000,000, shall bear interest at such initial rate or rates for such initial Interest Period, shall bear interest in such initial Interest Rate Mode, shall mature and become payable as to principal on such Maturity Date or Maturity Dates (not to exceed forty (40) years from the date of issuance of the 2023F Subordinated Bonds) in the amount and be subject to such mandatory sinking fund account payments on such mandatory sinking fund account payment dates, if any, all as set forth in the Sales Certificate. In addition to the provisions required pursuant to the terms of this Seventeenth Supplemental Resolution to be specified in the Sales Certificate, the Sales Certificate may contain such provisions, in a form approved by the District’s Bond Counsel and the District’s counsel, as the officer executing the Sales Certificate may deem necessary or desirable and consistent with the purpose of this Seventeenth Supplemental Resolution, including provisions (i) adding additional covenants and agreements to be observed by the District, (ii) curing, correcting, amending or supplementing any ambiguous, defective or ineffective provision contained in the Subordinate Master Resolution or this Seventeenth Supplemental Resolution, or (iii) amending or supplementing any provision contained herein to the extent necessary to obtain Credit Enhancement or a Liquidity Facility, to obtain a rating on the 2023F Subordinated Bonds, or to provide for the issuance of the 2023F Subordinated Bonds if, in the judgment of such officer such rating or provision is reasonable. The Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District, or the designee of any of them, is hereby authorized and instructed to execute and deliver the Sales Certificate and, upon execution and delivery thereof, the Sales Certificate shall be incorporated herein and in the Subordinate Master Resolution by reference. The execution and delivery of the Sales Certificate by any such officer shall be conclusive evidence that, where any approval, determination of necessity, desirability or consistency with the purpose of this Seventeenth Supplemental Resolution, or judgment or determination of reasonableness is required to be given or made, such judgment or determination has been given or made.

(b) The 2023F Subordinated Bonds shall be issued in the form of fully registered 2023F Subordinated Bonds in Authorized Denominations and no provision of the Subordinate Master Resolution relating to coupon bonds or coupons shall apply to the 2023F Subordinated Bonds. 2023F Subordinated Bonds (other than 2023F Subordinated Bonds in the Direct Purchase Index Mode) shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2023F Subordinated Bonds and shall be registered as set forth in Section 104.04 of this Seventeenth Supplemental Resolution. 2023F Subordinated Bonds in the Direct Purchase Index Mode shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2023F Subordinated Bonds and shall be registered in the name of the Holder thereof or as otherwise directed by such Holder. Registered ownership of the 2023F Subordinated Bonds, or any portion thereof, may not thereafter be transferred except as set forth in the Continuing Covenant Agreement (during any time that the 2023F Subordinated Bonds are in the Direct Purchase Index Mode), Section 2.05 of the Subordinate Master Resolution and Section 104.04 of this Seventeenth Supplemental Resolution. Each 2023F Subordinated Bond in the Direct Purchase Index Mode shall contain a legend indicating that the transferability of such 2023F Subordinated Bond is subject to the restrictions set forth in this Seventeenth Supplemental Resolution.

(c) The 2023F Subordinated Bonds shall be dated as of the date of their initial issuance and shall be numbered in such manner as is determined by the Trustee.

(d) The principal of and premium, if any, and interest on the 2023F Subordinated Bonds shall be payable in lawful money of the United States of America.

(e) Subject to Section 104.04 of this Seventeenth Supplemental Resolution, interest on the 2023F Subordinated Bonds shall be paid on each Interest Payment Date by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode by check mailed on the date on which due to the Holders of the 2023F Subordinated Bonds at the close of business on the Record Date for the 2023F Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2023F Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2023F Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2023F Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of \$1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2023F Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2023F Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2023F Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2023F Subordinated Bonds registered in the name of the Securities Depository (or its nominee), interest on any such 2023F Subordinated Bond shall be payable only upon surrender of such 2023F Subordinated Bond at the office of the Paying Agent.

(f) Subject to Section 104.04 of this Seventeenth Supplemental Resolution, the principal of and premium, if any, on each 2023F Subordinated Bond shall be payable on the Principal Payment Date of such 2023F Subordinated Bond upon surrender thereof at the office of

the Paying Agent; provided that the Paying Agent may agree with the Holder of any 2023F Subordinated Bond (and hereby does so agree with the Bank during any Direct Purchase Index Rate Period) that such Holder may, in lieu of surrendering the same for a new 2023F Subordinated Bond, endorse on such 2023F Subordinated Bond a record of partial payment of the principal of such 2023F Subordinated Bond in the form set forth below (which shall be typed or printed on such 2023F Subordinated Bond):

PAYMENTS ON ACCOUNT OF PRINCIPAL

Payment Date	Principal Amount Paid	Balance of Principal Amount Unpaid	Signature of Holder
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The Paying Agent shall maintain a record of each such partial payment made in accordance with the foregoing agreement and such record of the Paying Agent shall be conclusive. Such partial payment shall be valid upon payment of the amount thereof to the Holder of such 2023F Subordinated Bond, and the District, the Trustee and the Paying Agent shall be fully released and discharged from all liability to the extent of such payment regardless of whether such endorsement shall or shall not have been made upon such 2023F Subordinated Bond by the Holder thereof and regardless of any error or omission in such endorsement.

(g) Except as may be specifically set forth herein, the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District may treat the Holder of a 2023F Subordinated Bond as the absolute owner thereof for all purposes, whether or not such 2023F Subordinated Bond shall be overdue, and the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District shall not be affected by any knowledge or notice to the contrary. Payment of the principal of and premium, if any, and interest on each 2023F Subordinated Bond shall be made only to such Holder, which payments shall be valid and effectual to satisfy and discharge the liability of such 2023F Subordinated Bond to the extent of the sum or sums so paid. All 2023F Subordinated Bonds paid at maturity or on earlier redemption pursuant to the provisions of this Section shall be cancelled by the Paying Agent.

(h) Each 2023F Subordinated Bond shall bear interest at the applicable rate or rates during each applicable Interest Accrual Period until the entire Principal Amount thereof has been paid.

(i) The Sales Certificate shall designate the series, amounts and maturity or sinking fund payment dates of the Refunded Bonds.

Section 100.03. Payment of Principal and Interest of 2023F Subordinated Bonds; Acceptance of Terms and Conditions.

(a) The interest on each 2023F Subordinated Bond shall become due and payable on the Interest Payment Dates with respect to such 2023F Subordinated Bond to and

including the Maturity Date of such 2023F Subordinated Bond, and on each Redemption Date and on the date of any acceleration prior thereto. The principal of each 2023F Subordinated Bond shall become due and payable on the Principal Payment Date of such 2023F Subordinated Bond.

(b) By the acceptance of its 2023F Subordinated Bond, the Holder thereof shall be deemed to have agreed to all the terms and provisions of such 2023F Subordinated Bond as specified in such 2023F Subordinated Bond and the Subordinate Master Resolution, including without limitation the applicable Interest Periods, interest rates (including any applicable Alternate Rate), Purchase Dates, Mandatory Purchase Dates, Purchase Prices, mandatory and optional purchase and redemption provisions applicable to such 2023F Subordinated Bond, method and timing of purchase, redemption and payment. Such Holder further agrees that if, on any date upon which its 2023F Subordinated Bond is to be purchased, redeemed or paid at maturity or earlier due date, funds are on deposit with the Paying Agent or the Trustee to pay the full amount due on such 2023F Subordinated Bond, then such Holder shall have no rights under the Subordinate Master Resolution other than to receive such full amount due with respect to such 2023F Subordinated Bond and that interest on such 2023F Subordinated Bond shall cease to accrue as of such date.

(c) Notwithstanding anything herein to the contrary, while any 2023F Subordinated Bonds are Liquidity Provider Bonds, such Liquidity Provider Bonds shall bear interest and be payable at the times, in the manner and in the amounts required under the Liquidity Facility supporting such 2023F Subordinated Bonds or the Reimbursement Agreement related thereto.

Section 100.04. Calculation and Payment of Interest; Change in Interest Rate Mode; Maximum Rate.

(a) When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is the SIFMA Index, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is an index other than the SIFMA Index, interest shall be calculated on the basis specified in writing by the District on or before the first day of the applicable Direct Purchase Index Rate Period or Index Rate Period. When a Short-Term Mode is in effect, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Term Rate Mode or a Fixed Rate Mode is in effect, interest shall be calculated on the basis of a 360-day year comprised of twelve 30-day months. Payment of unpaid interest accrued on each 2023F Subordinated Bond during each Interest Accrual Period shall be made on the applicable Interest Payment Date for such 2023F Subordinated Bond to the Holder of record of such 2023F Subordinated Bond on the applicable Record Date.

(b) The 2023F Subordinated Bonds in any Interest Rate Mode other than a Fixed Rate Mode may be changed to any other Interest Rate Mode at the times and in the manner hereinafter provided. Subsequent to such change in Interest Rate Mode (other than a change to a Fixed Rate Mode), the 2023F Subordinated Bonds may again be changed to a different Interest Rate Mode at the times and in the manner hereinafter provided. A Fixed Rate Mode shall be in

effect until the Maturity Date, or acceleration thereof prior to the Maturity Date, and the 2023F Subordinated Bonds in a Fixed Rate Mode may not be changed to any other Interest Rate Mode.

(c) Subject to Section 100.09(b)(iii), no 2023F Subordinated Bonds shall bear interest at an interest rate higher than the Maximum Rate with respect thereto.

(d) In the absence of manifest error, the determination of interest rates (including any determination of rates in connection with a New Mode) and Interest Periods by the Remarketing Agent or the Calculation Agent, as applicable, as provided herein, and the record of interest rates maintained by the Paying Agent shall be conclusive and binding upon the Remarketing Agent, the Paying Agent, the Trustee, the District, the Holders and the Beneficial Owners.

Section 100.05. Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and in Section 100.04 hereof, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2023F Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2023F Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2023F Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2023F Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2023F Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Section 100.06. Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2023F Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on

and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023F Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period. In making any such determination the Remarketing Agent shall not take into account the per annum rate of interest that would be applicable to Liquidity Provider Bonds pursuant to the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

(a) During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

(b) During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Section 100.07. Determination of Term Rates and Fixed Rates.

(a) Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. Except as set forth in Section 100.11(a)(ii), the Term Rate shall be the minimum rate which, in the sole judgment of the Remarketing Agent, would result in a sale of such 2023F Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected, and the Call Protection Date specified, by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

(b) Fixed Rates. The Remarketing Agent shall determine the Fixed Rate for 2023F Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2023F Subordinated Bonds will have Serial Maturity Dates in accordance with Section 100.11(b)(v)). Except as set forth in Section 100.11(b)(v), the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2023F Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 100.11(b)(v), the Fixed Rate so established shall remain in effect until the Maturity Date of such 2023F Subordinated Bonds.

Section 100.08. Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2023F Subordinated Bonds (other than 2023F Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2023F Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2023F Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2023F Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2023F Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2023F Subordinated Bonds.

(a) For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2023F Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

(b) For 2023F Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2023F Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

Section 100.09. Determination of Direct Purchase Index Rates.

(a) During each Direct Purchase Index Rate Period, the 2023F Subordinated Bonds shall, subject to subsection (b) of this Section 100.09, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2023F Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2023F Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2023F Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2023F Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Master Resolution or this Seventeenth Supplemental Resolution to the contrary, including, without limitation, Section 102.02(b), but subject to Section 100.04(c) and Section 100.09(b)(ii) and (iii), from and after any Taxable Date, the interest rate on 2023F Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Master Resolution or this Seventeenth Supplemental Resolution to the contrary, including, without limitation, Section 102.02(b), but subject to Section 100.04(c) and Section 100.09(b)(iii), from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2023F Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2023F

Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Master Resolution or this Seventeenth Supplemental Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2023F Subordinated Bonds exceeds the Maximum Rate for such 2023F Subordinated Bonds, then (A) such 2023F Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2023F Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2023F Subordinated Bonds as calculated pursuant to this Section 100.09 and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2023F Subordinated Bonds as calculated pursuant to this Section 100.09 is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2023F Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2023F Subordinated Bonds are redeemed or tendered for purchase in accordance with this Seventeenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2023F Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything herein to the contrary, but subject to Section 100.04(c) and Section 100.09(b)(i), (ii) and (iii) during any Amortization Period, the 2023F Subordinated Bonds shall bear interest at the Bank Rate.

Section 100.10. Determination of Index Rates. During each Index Rate Period, the 2023F Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2023F Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2023F Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2023F Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2023F Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2023F Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2023F Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2023F Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the District shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2023F Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a

percentage point with five hundred thousandths of a percentage point rounded upward. All dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2023F Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Section 100.11. Changes in Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. Subject to the provisions of this Section, the District may effect a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period with respect to the 2023F Subordinated Bonds by following the procedures set forth in this Section.

(a) Changes to Interest Rate Modes Other Than Fixed Rate Mode; Changes in Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. The Interest Rate Mode for the 2023F Subordinated Bonds (other than the 2023F Subordinated Bonds in the Fixed Rate Mode) may be changed from one Interest Rate Mode to another Interest Rate Mode (other than the Fixed Rate Mode) and the Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2023F Subordinated Bonds may be changed, as follows:

(i) Notice to Notice Parties; Notice to Holders. No later than a Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2023F Subordinated Bonds preceding the proposed Conversion Date, the District shall give written notice to the Notice Parties of its intention to effect a change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period from the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period then prevailing (for purposes of this Section, the “Current Mode”) to another Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period (for purposes of this Section, the “New Mode”) specified in such written notice. Notice of the proposed change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be given by the Trustee by mail to the Holders of the 2023F Subordinated Bonds not less than the 10th day next preceding the proposed Conversion Date, provided that no notice need be given for a Conversion Date occurring on the Business Day following the last day of a Flexible Rate Period, an Index Rate Period or a Term Rate Period or on a Substitution Date. Such notice shall state: (1) the proposed Conversion Date; (2) that the 2023F Subordinated Bonds will be subject to mandatory tender for purchase on the proposed Conversion Date (regardless of whether all of the conditions to the change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period are satisfied); and (3) the Purchase Price of the 2023F Subordinated Bonds and the place of delivery for purchase of the 2023F Subordinated Bonds; provided that, if the proposed change is from one Direct Purchase Index Rate Period to a new Direct Purchase Index Rate Period and any Holder of the

2023F Subordinated Bonds shall continue to be a Holder of 2023F Subordinated Bonds in the new Direct Purchase Index Rate Period, the Holder may elect to retain its 2023F Subordinated Bonds by filing with the District and the Trustee not less than five days prior to the proposed Conversion Date a written notice identifying such 2023F Subordinated Bonds and the principal amount it wishes to retain.

(ii) Determination of Interest Rates. The New Mode shall commence on the Conversion Date and the interest rate(s) (together, in the case of a change to the Flexible Mode, with the Interest Period(s)) shall be determined in the manner provided in Sections 100.05, 100.06, 100.07, 100.09 and 100.10, as applicable; provided, however, that, in the case of a change to the Term Rate Mode, or from one Term Rate Period to a new Term Rate Period, if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to sell some or all of the 2023F Subordinated Bonds at a premium or a discount to par.

(iii) Conditions Precedent.

(1) The Conversion Date shall be:

(A) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2023F Subordinated Bonds end;

(B) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(C) in the case of a change from the Term Rate Mode to another Interest Rate Mode, or from one Term Rate Period to a new Term Rate Period, any day on which the applicable 2023F Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(D) in the case of a change from the Index Mode to another Interest Rate Mode, or from one Index Rate Period to a new Index Rate Period, any day on which the applicable 2023F Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(E) in the case of a change from the Direct Purchase Index Mode or from one Direct Purchase Index Rate Period to another Direct Purchase Index Rate Period, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(2) If the 2023F Subordinated Bonds to be converted are Flexible Rate Bonds, no Interest Period with respect to such 2023F Subordinated Bonds set after delivery by the

District to the Remarketing Agent of the notice of the intention to effect a change in Interest Rate Mode shall extend beyond the proposed Conversion Date.

(3) The following items shall have been delivered to the District and the Trustee, on or prior to the Conversion Date:

(A) a Favorable Opinion of Bond Counsel dated the Conversion Date; and

(B) if there is to be a Liquidity Facility or an Alternate Liquidity Facility or Credit Enhancement or an Alternate Credit Enhancement delivered in connection with such change, the items required by Section 102.08(d).

(4) If no Liquidity Facility is in effect to provide funds for the purchase of 2023F Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 102.04 shall not be less than the amount required to purchase all of the 2023F Subordinated Bonds on the Conversion Date at the Purchase Price.

(b) Change to Fixed Rate Mode. At the option of the District, the Interest Rate Mode for the 2023F Subordinated Bonds may be changed to the Fixed Rate Mode as provided in this Section 100.11(b). On any Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2023F Subordinated Bonds before the proposed Conversion Date pursuant to clause (ii) of this subsection (b), the District shall give written notice to the Notice Parties stating that the Interest Rate Mode will be changed to the Fixed Rate Mode and setting forth the proposed Conversion Date. In addition, such notice shall state whether some or all of the 2023F Subordinated Bonds to be converted shall be converted to Serial Bonds and, if so, the applicable Serial Maturity Dates and Serial Payments, all as determined pursuant to clause (v) of this subsection (b). Any such change in Interest Rate Mode shall be made as follows:

(i) Conversion Date. The Conversion Date shall be:

(1) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2023F Subordinated Bonds end;

(2) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(3) in the case of a change from the Term Rate Mode, any day on which the applicable 2023F Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(4) in the case of a change from the Index Mode, any day on which the applicable 2023F Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(5) in the case of a change from the Direct Purchase Index Mode, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(ii) Notice to Holders. Not less than the 10th day next preceding the Conversion Date, the Trustee shall mail, in the name of the District, a notice of such proposed change to the Holders of the 2023F Subordinated Bonds stating that the Interest Rate Mode will be changed to the Fixed Rate Mode, the proposed Conversion Date and that such Holder is required to tender such Holder's 2023F Subordinated Bonds for purchase on such proposed Conversion Date.

(iii) General Provisions Applying to Change to Fixed Rate Mode. The change to the Fixed Rate Mode shall not occur unless the following items shall have been delivered to the District and the Trustee and the following conditions shall have been satisfied, in each case on or prior to the Conversion Date:

(1) a Favorable Opinion of Bond Counsel dated the Conversion Date;

(2) if there is to be Credit Enhancement or Alternate Credit Enhancement delivered in connection with such change, the items required by Section 102.08(d) in connection with the delivery of Credit Enhancement or Alternate Credit Enhancement; and

(3) if no Liquidity Facility is in effect to provide funds for the purchase of 2023F Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 102.04 shall not be less than the amount required to purchase all of the 2023F Subordinated Bonds on the Conversion Date at the Purchase Price.

(iv) Determination of Interest Rate. The Fixed Rate (or Fixed Rates in the case of Serial Bonds) for the 2023F Subordinated Bonds to be converted to the Fixed Rate Mode shall be established by the Remarketing Agent on the Rate Determination Date applicable thereto pursuant to the provisions of Section 100.07(b). Such Fixed Rate or Fixed Rates shall remain in effect until the Maturity Date or Serial Maturity Dates, as applicable, of such 2023F Subordinated Bonds. Such determination shall be conclusive and binding upon the District, the Trustee, the Credit Provider, if any, and the Holders of the 2023F Subordinated Bonds to which such rate will be applicable. Not later than 5:00 p.m. on the date of determination of the Fixed Rate, the Remarketing Agent shall notify the District, the Trustee and the Credit Provider, if any, of such rate by telephone.

(v) Serialization and Sinking Fund Account Redemption; Price. Upon conversion of the 2023F Subordinated Bonds to the Fixed Rate Mode, the 2023F Subordinated Bonds shall be remarketed at par, shall mature on the same Maturity Date and be subject to the same mandatory sinking fund account redemption, if any, and optional redemption provisions as set forth in this Seventeenth Supplemental Resolution prior to the Conversion; provided, however, that if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to (1) have some of the 2023F Subordinated Bonds be Serial Bonds and some subject to mandatory sinking fund

account redemption even if such 2023F Subordinated Bonds were not Serial Bonds or subject to mandatory sinking fund account redemption prior to such change, (2) change the optional redemption dates and/or premiums set forth in Section 101.03(b), and/or (3) sell some or all of the 2023F Subordinated Bonds at a premium or a discount to par.

(c) Failure to Satisfy Conditions Precedent to an Interest Rate Mode Change.

In the event the conditions described above in subsections (a) or (b), as applicable, of this Section have not been satisfied by the applicable Conversion Date, then the New Mode shall not take effect (although any mandatory tender shall be made on such date if notice has been sent to the Holders stating that such 2023F Subordinated Bonds would be subject to mandatory purchase on such date). If the failed change in Interest Rate Mode was from the Flexible Mode, such 2023F Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the failed Conversion Date in accordance with Section 100.05. If the failed change in Interest Rate Mode was from the Daily Mode, such 2023F Subordinated Bonds shall remain in the Daily Mode, and if the failed change in Interest Rate Mode was from the Weekly Mode, such 2023F Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in accordance with the applicable provisions of Section 100.06 on and as of the failed Conversion Date. If the failed change in Interest Rate Mode was from the Term Rate Mode, then such 2023F Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 100.07. If the failed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2023F Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 100.09. If the failed change in Interest Rate Mode was from the Index Mode, then the 2023F Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 100.10.

(d) Rescission of Election. Notwithstanding anything herein to the contrary,

the District may rescind any election by it to change an Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period as described above prior to the Conversion Date by giving written notice thereof to the Notice Parties prior to 10:00 a.m. on the Business Day preceding such Conversion Date. If the Trustee receives notice of such rescission prior to the time the Trustee has given notice to the Holders of the 2023F Subordinated Bonds, then such notice of change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be of no force and effect. If the Trustee receives notice from the District of rescission of a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period after the Trustee has given notice thereof to the Holders of the 2023F Subordinated Bonds, then, if the proposed Conversion Date would have been a Mandatory Purchase Date, such date shall continue to be a Mandatory Purchase Date and the Interest Rate Mode for the 2023F Subordinated Bonds shall be determined as set forth in the remainder of this paragraph. If the proposed change in Interest Rate Mode was from the Flexible Mode, such 2023F Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the proposed Conversion Date in accordance with Section 100.05. If the proposed change in Interest Rate Mode was from the Daily Mode, such 2023F Subordinated Bonds shall remain in the Daily Mode, and if the proposed change in Interest Rate Mode was from the Weekly Mode, such 2023F Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in

accordance with the applicable provisions of Section 100.06 on and as of the proposed Conversion Date. If the proposed change in Interest Rate Mode was from the Term Rate Mode, then such 2023F Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 100.07. If the proposed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2023F Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 100.09. If the proposed change in Interest Rate Mode was from the Index Mode, then the 2023F Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 100.10.

ARTICLE CI

REDEMPTION OF 2023F SUBORDINATED BONDS

Section 101.01. Optional Redemption of Flexible Rate Bonds. 2023F Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2023F Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Section 101.02. Optional Redemption of 2023F Subordinated Bonds in the Daily Mode and the Weekly Mode. 2023F Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023F Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 101.03. Optional Redemption of 2023F Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

(a) 2023F Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2023F Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2023F Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2023F Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(b) 2023F Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2023F Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(c) The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2023F Subordinated Bonds so changed to a Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

(d) Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2023F Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Section 101.04. Optional and Mandatory Redemption of 2023F Subordinated Bonds in the Direct Purchase Index Mode.

(a) Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2023F Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023F Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

(b) 2023F Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 101.05. Mandatory Sinking Fund Account Redemption of 2023F Subordinated Bonds and Redemption of Liquidity Provider Bonds.

(a) The 2023F Subordinated Bonds shall be subject to redemption prior to maturity from mandatory sinking fund account payments for the 2023F Subordinated Bonds on the dates, if any, specified in the Sales Certificate, at a Redemption Price equal to the principal amount of the 2023F Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The mandatory sinking fund account payments for the 2023F Subordinated Bonds shall be in the amounts and payable on the dates set forth in the Sales Certificate.

(b) Notwithstanding anything herein to the contrary, Liquidity Provider Bonds are subject to redemption on the dates, in the amounts and otherwise in accordance with the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

Section 101.06. Funds for Redemption of 2023F Subordinated Bonds. Unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023F Subordinated Bonds, the Redemption Price of 2023F Subordinated Bonds

(other than Liquidity Provider Bonds) shall be paid solely from (1) moneys obtained from a drawing on the Credit Enhancement supporting the 2023F Subordinated Bonds pursuant to Section 102.08(a) or (2) Available Moneys.

Section 101.07. Selection of 2023F Subordinated Bonds for Redemption.

Whenever provision is made for the redemption of less than all of the 2023F Subordinated Bonds of any one maturity, the Trustee shall select the 2023F Subordinated Bonds to be redeemed, from the Outstanding 2023F Subordinated Bonds of such maturity not previously called for redemption, by lot in any manner which the Trustee deems fair; provided, however, that Liquidity Provider Bonds shall be redeemed prior to the redemption of other 2023F Subordinated Bonds; provided further, however, that during a Direct Purchase Index Rate Period, the 2023F Subordinated Bonds shall be redeemed pro rata. The Trustee shall promptly notify the District in writing of the numbers of the 2023F Subordinated Bonds so selected for redemption.

Section 101.08. Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2023F Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2023F Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023F Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2023F Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2023F Subordinated Bonds to be redeemed, and shall also state that the interest on the 2023F Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023F Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2023F Subordinated Bonds to be redeemed.

Notice of optional redemption shall be given by the Trustee for and on behalf of the District, at the written request of the District (which request shall be given to the Trustee (unless waived by the Trustee) at least twenty-five (25) days prior to the date fixed for redemption or such shorter period as is acceptable to the Trustee). Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption.

Notwithstanding the foregoing, notice of redemption shall not be required for 2023F Subordinated Bonds redeemed on a Mandatory Purchase Date.

Section 101.09. Partial Redemption of 2023F Subordinated Bond. Upon surrender of any 2023F Subordinated Bond redeemed in part only, the District shall execute and the Trustee shall deliver to the registered owner thereof, at the expense of the District, a new 2023F Subordinated Bond or Bonds, of the same maturity, of Authorized Denominations in

aggregate principal amount equal to the unredeemed portion of the 2023F Subordinated Bond surrendered.

Section 101.10. Effect of Redemption. Notice of redemption having been duly given as aforesaid, and moneys for payment of the Redemption Price being held by the Trustee, the 2023F Subordinated Bonds so to be redeemed shall, on the date designated in such notice, become due and payable at the Redemption Price specified in such notice; and from and after the date so designated interest on the 2023F Subordinated Bonds so designated for redemption shall cease to accrue and the Holders and Beneficial Owners of said 2023F Subordinated Bonds shall have no rights in respect thereof, except to receive payment of the Redemption Price thereof.

Section 101.11. Disposition of Redeemed 2023F Subordinated Bonds. All 2023F Subordinated Bonds redeemed pursuant to the provisions of this Article CI shall be delivered to and cancelled by the Trustee and shall thereafter be delivered by the Trustee to, or upon the order of, the District, and no 2023F Subordinated Bonds shall be issued in place thereof.

ARTICLE CII

PURCHASE OF 2023F SUBORDINATED BONDS

Section 102.01. Optional Tenders of 2023F Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 102.06, the Beneficial Owners of 2023F Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2023F Subordinated Bonds (or portions of those 2023F Subordinated Bonds, provided that no 2023F Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Section 102.02. Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode.

(a) The 2023F Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2023F Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2023F Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2023F Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2023F

Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

(b) Notwithstanding subparagraph (a) above and anything to the contrary in this Seventeenth Supplemental Resolution, in the event the 2023F Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2023F Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2023F Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing, in which case the 2023F Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2023F Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2023F Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2023F Subordinated Bonds may be subject to optional redemption or purchase at the sole option of the District at any time with notice as and to the extent provided in the Continuing Covenant Agreement.

Section 102.03. Remarketing of 2023F Subordinated Bonds; Notices.

(a) Remarketing of 2023F Subordinated Bonds. The Remarketing Agent shall use its best efforts pursuant to the terms and conditions of the Remarketing Agreement to offer for sale:

(i) all 2023F Subordinated Bonds or portions thereof as to which a Tender Notice has been delivered pursuant to Section 102.01; and

(ii) all 2023F Subordinated Bonds required to be purchased on a Mandatory Purchase Date described in clauses (i), (ii), (iii), (iv), (viii) or (ix) of the definition thereof; and

(iii) any Liquidity Provider Bonds (A) purchased on a Purchase Date described in clause (i) or (ii) above, (B) with respect to which the Liquidity Provider has provided notice to the Trustee and the Remarketing Agent that it has reinstated the Available Amount, (C) with respect to which an Alternate Liquidity Facility and Alternate Credit Enhancement is in effect (if such funds were secured by a Credit Enhancement prior to becoming Liquidity Provider Bonds, which Credit Enhancement is no longer in effect), and/or (D) which are being marketed as Fixed Rate Bonds.

The Remarketing Agent shall not remarket 2023F Subordinated Bonds to the District or any affiliate thereof. In connection with the remarketing of any 2023F Subordinated Bonds with respect to which notice of redemption or notice of mandatory purchase has been

given, the Remarketing Agent shall notify each person to which such 2023F Subordinated Bonds are remarketed of such notice of redemption or notice of mandatory purchase.

Anything in this Seventeenth Supplemental Resolution to the contrary notwithstanding, if there shall have occurred and be continuing either a Credit Provider Failure or a Liquidity Provider Failure with respect to a Series of 2023F Subordinated Bonds, the Remarketing Agent shall not remarket such 2023F Subordinated Bonds. All other provisions of this Seventeenth Supplemental Resolution, including without limitation, those relating to the setting of interest rates and Interest Periods and mandatory and optional purchases, shall remain in full force and effect during the continuance of such Credit Provider Failure or Liquidity Provider Failure.

(b) Notice of Remarketing; Registration Instructions; New Bonds. On each date on which a 2023F Subordinated Bond is to be purchased pursuant to this Article CII:

(i) the Remarketing Agent shall notify the Trustee by Electronic Means by 11:30 a.m. if it has been unable to remarket any tendered 2023F Subordinated Bonds, and shall include in such notice the principal amount of 2023F Subordinated Bonds it has been unable to remarket;

(ii) the Remarketing Agent shall notify the Trustee by Electronic Means not later than 1:00 p.m. of the names of the purchasers of the successfully remarketed 2023F Subordinated Bonds and such information as may be necessary to register the 2023F Subordinated Bonds and the registration instructions with respect thereto;

(iii) the Remarketing Agent shall cause the proceeds of the remarketing by such Remarketing Agent of tendered 2023F Subordinated Bonds to be paid to the Trustee in immediately available funds not later than 12:00 noon on the Purchase Date for such 2023F Subordinated Bonds; and

(iv) if the 2023F Subordinated Bonds are not in the Book-Entry System, the Trustee shall authenticate new 2023F Subordinated Bonds for the respective purchasers thereof which shall be available for pick-up by the Remarketing Agent not later than 2:30 p.m.

(c) Draw on Liquidity Facility or Request for Funds. On each date on which a 2023F Subordinated Bond is to be purchased pursuant to this Article CII, if (i) the Remarketing Agent shall have given notice to the Trustee pursuant to clause (b)(i) above that it has been unable to remarket any of the 2023F Subordinated Bonds or (ii) the Trustee has not received from the Remarketing Agent an amount sufficient to pay the Purchase Price of tendered Bonds, by 12:00 noon on the Purchase Date, then the Trustee shall draw on the applicable Liquidity Facility (or if no Liquidity Facility, request funds from the District) by 12:15 p.m. in an amount equal to the Purchase Price of all such 2023F Subordinated Bonds which have not been successfully remarketed, requesting payment not later than 2:45 p.m. on the Purchase Date. Subject to Section 102.04, if a Liquidity Facility is in effect, the Trustee shall also give the District notice by 2:45 p.m. on the Purchase Date if it does not have funds in the Remarketing

Proceeds Account and the Liquidity Facility Purchase Account sufficient to pay the Purchase Price of 2023F Subordinated Bonds tendered on such Purchase Date. Any draw on a Liquidity Facility to be made on a Substitution Date shall be on the Liquidity Facility being replaced.

Section 102.04. Source of Funds for Purchase of 2023F Subordinated Bonds.

By 3:00 p.m. on the date on which a 2023F Subordinated Bond is to be purchased pursuant to this Article CII, and except as set forth in Section 102.06(b)(ii), the Trustee shall purchase tendered 2023F Subordinated Bonds from the tendering Holders at the applicable Purchase Price by wire transfer in immediately available funds. Funds for the payment of such Purchase Price shall be derived solely from the following sources in the order of priority indicated and neither the Trustee nor the Remarketing Agent shall be obligated to provide funds from any other source:

(a) immediately available funds on deposit in the Remarketing Proceeds Account established for the 2023F Subordinated Bonds;

(b) immediately available funds on deposit in the Liquidity Facility Purchase Account established for the 2023F Subordinated Bonds; and

(c) moneys of the District on deposit in the District Purchase Account established for the 2023F Subordinated Bonds.

If no Liquidity Facility is in effect with respect to the 2023F Subordinated Bonds, then the District shall be obligated to deposit amounts into the District Purchase Account established for the 2023F Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023F Subordinated Bonds are insufficient therefor. If a Liquidity Facility is in effect with respect to the 2023F Subordinated Bonds, then the District may, but shall not be obligated to, deposit amounts into the District Purchase Account established for the 2023F Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023F Subordinated Bonds and the Liquidity Facility Purchase Account established for the 2023F Subordinated Bonds are insufficient therefor. If so specified in the Sales Certificate with respect to the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period, the failure of the District to deposit amounts into the District Purchase Account when the District is obligated to deposit such amounts under this Section 102.04 shall constitute an “event of default” under Section 9.01 of the Subordinate Master Resolution.

Section 102.05. Delivery of Subordinated Bonds. On each date on which a 2023F Subordinated Bond is to be purchased pursuant to this Article CII, such 2023F Subordinated Bond shall be delivered as follows:

(a) 2023F Subordinated Bonds sold by the Remarketing Agent and described in Section 102.04(a) shall be delivered by the Remarketing Agent to the purchasers of such 2023F Subordinated Bonds by 3:00 p.m.;

(b) 2023F Subordinated Bonds purchased by the Trustee with moneys described in Section 102.04(b) shall be registered immediately in the name of the Liquidity

Provider or its nominee (which may be the Securities Depository) or as otherwise specified in writing by the Liquidity Provider and held as specified in writing by the Liquidity Provider, in either case on or before 3:00 p.m.; and

(c) 2023F Subordinated Bonds purchased by the District with moneys described in Section 102.04(c) shall be registered immediately in the name of the District or its nominee on or before 3:00 p.m. 2023F Subordinated Bonds so owned by the District shall continue to be Outstanding under the terms of the Subordinate Master Resolution and be subject to all of the terms and conditions of the Subordinate Master Resolution and shall be subject to remarketing by the Remarketing Agent.

When any Liquidity Provider Bonds are remarketed, the Trustee shall not release 2023F Subordinated Bonds so remarketed to the Remarketing Agent until the Trustee has received confirmation that the Liquidity Facility has been reinstated.

Section 102.06. Book-Entry Tenders.

(a) Notwithstanding any other provision of this Article CII to the contrary, all tenders for purchase during any period in which the 2023F Subordinated Bonds are registered in the name of any Securities Depository or its nominee shall be subject to the terms and conditions set forth in the Representations Letter and to any regulations promulgated by the Securities Depository. During any period that the 2023F Subordinated Bonds are registered in the name of DTC or its nominee, the tender option rights of holders of 2023F Subordinated Bonds may be exercised only by a Direct Participant of DTC acting, directly or indirectly, on behalf of a Beneficial Owner of 2023F Subordinated Bonds by giving notice of its election to tender 2023F Subordinated Bonds or portions thereof at the times and in the manner described above. Beneficial Owners will not have any rights to tender 2023F Subordinated Bonds directly to the Trustee. Procedures under which a Beneficial Owner may direct a Direct Participant or DTC, or an Indirect Participant of DTC acting through a Director Participant of DTC, to exercise a tender option right in respect of 2023F Subordinated Bonds or portions thereof in an amount equal to all or a portion of such Beneficial Owner's beneficial ownership interest therein shall be governed by standing instructions and customary practices determined by such Direct Participant or Indirect Participant. During any period that the 2023F Subordinated Bonds are registered in the name of DTC or its nominee, delivery of 2023F Subordinated Bonds required to be tendered for purchase shall be effected by the transfer by a Direct Participant on the applicable Purchase Date of a book-entry credit to the account of the Trustee of a beneficial ownership interest in such 2023F Subordinated Bonds.

(b) Notwithstanding anything expressed or implied herein to the contrary, during any period that a Book-Entry System for the 2023F Subordinated Bonds is maintained by the District:

(i) there shall be no requirement of physical delivery to or by the Trustee or the Remarketing Agent of:

(1) any 2023F Subordinated Bonds subject to mandatory or optional purchase as a condition to the payment of the Purchase Price therefor;

(2) any 2023F Subordinated Bonds that have become Liquidity Provider Bonds; or

(3) any remarketing proceeds of such 2023F Subordinated Bonds or Liquidity Provider Bonds; and

(ii) except as provided in (iii) below, neither the Trustee nor the Paying Agent shall have any responsibility for paying the Purchase Price of any tendered 2023F Subordinated Bond or for remitting remarketing proceeds to any Person; and

(iii) the Trustee's sole responsibilities in connection with the purchase and remarketing of a tendered 2023F Subordinated Bond shall be to:

(1) draw upon the Liquidity Facility to pay the Purchase Price of 2023F Subordinated Bond in the manner provided herein and to remit the amount so drawn to or upon the order of the Securities Depository for the benefit of the tendering Beneficial Owners; and

(2) remit any proceeds derived from the remarketing of a Liquidity Provider Bond and any unused proceeds from a drawing on the Liquidity Facility to the Liquidity Provider.

Section 102.07. No Book-Entry System. During any period that the 2023F Subordinated Bonds shall not be in a Book-Entry System, the following procedures shall be followed:

(a) 2023F Subordinated Bonds shall be delivered (with all necessary endorsements) at or before 12:00 noon on the Purchase Date at the office of the Paying Agent in New York, New York; provided, however, that payment of the Purchase Price shall be made pursuant to this Section only if the 2023F Subordinated Bond so delivered to the Paying Agent conforms in all respects to the description thereof in the notice described in this Section. Payment of the Purchase Price with respect to purchases under this Section shall be made to the Holders of tendered 2023F Subordinated Bonds by wire transfer in immediately available funds by the Paying Agent by 3:00 p.m. on the Purchase Date.

(b) If a 2023F Subordinated Bond to be purchased pursuant to this Article CII is not delivered by the Holder to the Paying Agent by 12:00 noon on the date in which such 2023F Subordinated Bond is to be purchased, the Paying Agent shall hold any funds received for the purchase of those 2023F Subordinated Bonds in trust in a separate account and shall pay such funds to the former Holders of the 2023F Subordinated Bonds upon presentation of the 2023F Subordinated Bonds. Such undelivered 2023F Subordinated Bonds shall cease to accrue interest as to the former Holders on such purchase date and moneys representing the Purchase Price shall be available against delivery of those 2023F Subordinated Bonds at the Principal Office of the Paying Agent; provided, however, that any funds which shall be so held by the Paying Agent and which remain unclaimed by the former Holder of a 2023F Subordinated Bond not presented for purchase for a period of two years after delivery of such funds to the Paying Agent, shall, to the extent permitted by law, upon request in writing by the District and the furnishing of security or indemnity to the Paying Agent's satisfaction, be paid to the District free of any trust or lien and thereafter the former Holder of such 2023F Subordinated Bond shall look only to the District and

then only to the extent of the amounts so received by the District without any interest thereon and the Paying Agent shall have no further responsibility with respect to such moneys or payment of the Purchase Price of such 2023F Subordinated Bonds. The Paying Agent shall authenticate a replacement 2023F Subordinated Bond for any undelivered 2023F Subordinated Bond which may then be remarketed by the Remarketing Agent.

(c) The Paying Agent shall hold all 2023F Subordinated Bonds properly tendered to it for purchase hereunder as agent and bailee of, and in escrow for the benefit of, the respective Holders of the 2023F Subordinated Bonds which shall have so tendered such 2023F Subordinated Bonds until moneys representing the Purchase Price of such 2023F Subordinated Bonds shall have been delivered to or for the account of or to the order of such Holders.

Section 102.08. Credit Enhancement and Liquidity Facility.

(a) While a Credit Enhancement is in effect with respect to the 2023F Subordinated Bonds, the Trustee shall, on the Business Day preceding each Interest Payment Date and Principal Payment Date draw on the Credit Enhancement in accordance with the terms thereof so as to receive thereunder with respect to the 2023F Subordinated Bonds secured by the Credit Enhancement by 1:00 p.m. on said Interest Payment Date and Principal Payment Date, an amount, in immediately available funds, equal to the amount of interest and principal payable on such 2023F Subordinated Bonds on such Interest Payment Date and Principal Payment Date. The proceeds of such draws shall be deposited in a separate account in the Subordinated Bond Interest and Principal Fund and shall be applied to pay principal of and interest on such 2023F Subordinated Bonds prior to the application of any other funds held by the Trustee therefor. Amounts held in such account shall be held uninvested and separate and apart from all other funds and accounts. Such accounts shall at all times be Eligible Accounts.

(b) If a Liquidity Facility is in effect with respect to the 2023F Subordinated Bonds, on each date on which a 2023F Subordinated Bond is to be purchased, the Trustee, by demand given by Electronic Means by 12:15 p.m., shall draw on the Liquidity Facility in accordance with the terms thereof so as to receive thereunder by 2:45 p.m. on such date an amount, in immediately available funds, sufficient, together with the proceeds of the remarketing of such 2023F Subordinated Bonds on such date, to enable the Trustee to pay the Purchase Price in connection therewith. The Trustee shall deposit said proceeds in the Liquidity Facility Purchase Account established for the 2023F Subordinated Bonds pursuant to Section 102.09(b) hereof.

(c) Notwithstanding the foregoing paragraphs of this Section, if the Credit Provider and the Liquidity Provider are the same entity, the Trustee shall not draw on the Credit Enhancement with respect to any payments due or made in connection with Liquidity Provider Bonds. In no event shall the Trustee draw on the Credit Enhancement or Liquidity Facility with respect to any payments made or made in connection with 2023F Subordinated Bonds not covered by the Credit Enhancement or Liquidity Facility or 2023F Subordinated Bonds owned by the District.

(d) The District may provide an Alternate Credit Enhancement or Alternate Liquidity Facility on any day on which 2023F Subordinated Bonds to be secured by such

Alternate Credit Enhancement or Alternate Liquidity Facility are subject to redemption at par and not later than the fifth (5th) Business Day prior to the Expiration Date of the Credit Enhancement or Liquidity Facility then in effect and supporting such 2023F Subordinated Bonds. The District shall give the Notice Parties written notice of the proposed substitution of an Alternate Credit Enhancement or Alternate Liquidity Facility no less than two (2) Business Days prior to the date on which the Trustee is required to provide notice of the proposed substitution to the Holders of the 2023F Subordinated Bonds. The Trustee shall give notice of such Substitution Date in accordance with Section 102.02. On or before the Substitution Date there shall be delivered to the Trustee (i) the Alternate Credit Enhancement or the Alternate Liquidity Facility in substitution for the Credit Enhancement or Liquidity Facility then in effect, (ii) a Favorable Opinion of Bond Counsel, (iii) a written Opinion of Counsel for the provider of the Alternate Credit Enhancement or Alternate Liquidity Facility, as applicable, to the effect that such Alternate Credit Enhancement or Alternate Liquidity Facility is a valid, legal and binding obligation of the provider thereof, and (iv) unless waived by such entity, written evidence satisfactory to the Credit Provider and the Liquidity Provider of the provision for purchase from the Liquidity Provider of all Liquidity Provider Bonds, at a price equal to the principal amount thereof plus accrued and unpaid interest, and payment of all amounts due to the Credit Provider and the Liquidity Provider under the applicable Reimbursement Agreement or Liquidity Facility on or before the effective date of such Alternate Credit Enhancement or Alternate Liquidity Facility. Upon the satisfaction of the conditions described in the preceding sentence, the Trustee shall accept such Alternate Credit Enhancement or Alternate Liquidity Facility on the close of business on the Substitution Date and shall surrender the Credit Enhancement or Liquidity Facility then in effect to the provider thereof on the Substitution Date; provided, however, that the Trustee shall not surrender the Credit Enhancement or Liquidity Facility then in effect unless and until the Trustee has received all amounts drawn thereunder. If any condition to the substitution is not satisfied, the substitution shall not occur but the 2023F Subordinated Bonds shall remain subject to mandatory purchase on the proposed Substitution Date.

(e) In the event of an extension of the Expiration Date, the District shall give to the Notice Parties, a written notice of the new Expiration Date at least fifteen (15) days prior to the fifth Business Day prior to the Expiration Date in effect prior to such extension.

(f) The references to Credit Enhancement and Liquidity Facility and Credit Provider and Liquidity Provider shall be disregarded during any period during which a Credit Enhancement or Liquidity Facility, as applicable, is not in effect.

(g) The Trustee shall not have any lien on or security interest in any amounts drawn under a Credit Enhancement or a Liquidity Facility or any amounts on deposit in the account described in Section 102.08(a) above in which proceeds of draws on a Credit Enhancement are deposited or a Liquidity Facility Purchase Account.

(h) If at any time during the term of a Credit Enhancement and/or Liquidity Facility any successor Trustee shall be appointed and qualified under the Subordinate Master Resolution, the resigning or removed Trustee shall request that the Credit Provider and/or Liquidity Provider, as applicable, transfer such Credit Enhancement and/or Liquidity Facility to the successor Trustee and such resignation or removal of the Trustee shall not be effective until the Credit Enhancement and/or Liquidity Facility has been duly transferred (including the

payment of any required transfer fee) to such successor Trustee. If the resigning or removed Trustee fails to make this request, the successor Trustee shall do so before accepting appointment.

(i) The Trustee may accept, hold and draw upon a Credit Enhancement and/or a Liquidity Facility issued by itself or by any of its corporate affiliates to provide security and a source of payment for the 2023F Subordinated Bonds. The Trustee covenants that it shall at all times maintain adequate controls to manage any potential conflict of interest. Notwithstanding any other provision herein to the contrary, while the Credit Provider and/or Liquidity Provider is the Trustee or an affiliate of the Trustee and such Credit Provider and/or Liquidity Provider has not failed to honor a properly presented draw on the Credit Enhancement and/or Liquidity Facility, the Trustee shall have no discretion with respect to the acceleration of the 2023F Subordinated Bonds and shall do so only upon the written direction of such Credit Provider and/or Liquidity Provider and as otherwise permitted by the Subordinate Master Resolution. The Trustee shall immediately tender its resignation and take prompt steps to have a successor trustee appointed satisfying the requirements of the Subordinate Master Resolution if such affiliated Credit Provider and/or Liquidity Provider shall fail at any time to honor a properly presented and conforming draw on the Credit Enhancement and/or Liquidity Facility.

Section 102.09. Purchase Fund. There is hereby established and there shall be maintained with the Trustee a separate fund to be known as the “Purchase Fund.” The Trustee shall further establish separate accounts within the Purchase Fund to be known as the “Liquidity Facility Purchase Account”, the “Remarketing Proceeds Account” and the “District Purchase Account”. At any time at which there is a Liquidity Facility in effect with respect to the 2023F Subordinated Bonds, the Purchase Fund shall be required to be an Eligible Account.

(a) Remarketing Proceeds Account. Upon receipt of the proceeds of a remarketing of a 2023F Subordinated Bond on the date such 2023F Subordinated Bond is to be purchased, the Trustee shall deposit such proceeds in the Remarketing Proceeds Account for application to the Purchase Price of such 2023F Subordinated Bond. Notwithstanding the foregoing, upon the receipt of the proceeds of a remarketing of Liquidity Provider Bonds, the Trustee shall immediately pay such proceeds to the Liquidity Provider to the extent of any amount owing to the Liquidity Provider.

(b) Liquidity Facility Purchase Account. Upon receipt of the immediately available funds pursuant to Section 102.08(b), the Trustee shall deposit such money in the Liquidity Facility Purchase Account for application to the Purchase Price of the 2023F Subordinated Bonds to the extent that the moneys on deposit in the Remarketing Proceeds Account shall not be sufficient. Any amounts deposited in the Liquidity Facility Purchase Account and not needed with respect to the Purchase Price of any 2023F Subordinated Bonds shall be immediately returned to the Liquidity Provider.

(c) District Purchase Account. Upon receipt of funds from the District pursuant to Section 102.04, the Trustee shall deposit such funds in the District Purchase Account for application to the Purchase Price of the 2023F Subordinated Bonds. Any amounts deposited in the District Purchase Account and not needed with respect to the Purchase Price for any 2023F Subordinated Bonds shall be immediately returned to the District.

(d) Investment. Amounts held in the Liquidity Facility Purchase Account, the Remarketing Proceeds Account and the District Purchase Account by the Trustee shall be held uninvested and separate and apart from all other funds and accounts.

Section 102.10. Inadequate Funds for Tenders.

(a) If moneys sufficient to pay the Purchase Price of all Tendered Bonds to be purchased on any Purchase Date are not available (1) no purchase shall be consummated of Tendered Bonds on such Purchase Date; (2) all Tendered Bonds shall be returned to the Holders thereof; and (3) all remarketing proceeds with respect to the 2023F Subordinated Bonds shall be returned to the Remarketing Agent for return to the Persons providing such moneys. Thereafter, the Trustee shall continue to take all such action available to it to obtain remarketing proceeds with respect to all Tendered Bonds from the Remarketing Agent and sufficient other funds from the Liquidity Provider, if any, or, subject to Section 102.04, the District to effect a subsequent successful remarketing or purchase of any Tendered Bonds.

(b) All Tendered Bonds (other than Liquidity Provider Bonds and 2023F Subordinated Bonds in the Direct Purchase Index Mode) shall bear interest at the Maximum Rate (or such lower interest rate or rates specified in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period) during the period of time from and including the applicable Purchase Date to (but not including) the date that all such Tendered Bonds are successfully remarketed, redeemed, purchased or paid (the “Delayed Remarketing Period”).

(c) The District may direct the conversion of the Tendered Bonds to a different Interest Rate Mode, Index Rate Period or Term Rate Period during the Delayed Remarketing Period in accordance with Section 100.11 hereof; provided that the District shall not be required to comply with the notice requirements described in Section 100.11.

(d) Subject to the terms of the Remarketing Agreement, if any, the Remarketing Agent shall continue to use its best efforts to remarket all of the Tendered Bonds at rates up to and including the Maximum Rate.

(e) During the Delayed Remarketing Period, the Trustee may, upon direction of the District, apply amounts on deposit in the Redemption Fund to the redemption of such Tendered Bonds, as a whole or in part on any Business Day during the Delayed Remarketing Period, at a redemption price equal to the principal amount thereof, together with interest accrued thereon to the date fixed for redemption, without premium. Notwithstanding Section 101.08 to the contrary, the Trustee shall give five Business Days’ notice of such redemption to the Holders of the 2023F Subordinated Bonds to be redeemed.

(f) During the Delayed Remarketing Period, interest on such Tendered Bonds (other than 2023F Subordinated Bonds in the Direct Purchase Index Mode) shall be paid to the Holders thereof (i) on the first Business Day of each calendar month occurring during the Delayed Remarketing Period and (ii) on the last day of the Delayed Remarketing Period.

ARTICLE CIII

REMARKETING AGENT

Section 103.01. Appointment of Remarketing Agent.

(a) The Remarketing Agent shall be appointed pursuant to the Remarketing Agreement to remarket 2023F Subordinated Bonds pursuant to this Seventeenth Supplemental Resolution and perform the other duties of the Remarketing Agent described hereunder, and to keep such books and records as shall be consistent with prudent industry practice and to make such books and records available for inspection by the District and the Trustee at all reasonable times. The Remarketing Agent shall act as such under the Remarketing Agreement.

(b) The Remarketing Agent may at any time resign and be discharged of the duties and obligations created by this Seventeenth Supplemental Resolution as set forth in the Remarketing Agreement. The Remarketing Agent may suspend its remarketing efforts as set forth in the Remarketing Agreement. The Remarketing Agent may be removed at any time, at the direction of the District as set forth in the Remarketing Agreement. Any successor Remarketing Agent shall be selected by the District, and shall be a member of the Financial Industry Regulatory Authority, or its successors, shall have a capitalization of at least fifteen million dollars (\$15,000,000), shall be authorized by law to perform all the duties set forth in this Seventeenth Supplemental Resolution and shall be acceptable to the Credit Provider and Liquidity Provider. The District's delivery to the Trustee of a certificate setting forth the effective date of the appointment of a successor Remarketing Agent and the name of such successor shall be conclusive evidence that (i) if applicable, the predecessor Remarketing Agent has been removed in accordance with the provisions of this Seventeenth Supplemental Resolution and (ii) such successor has been appointed and is qualified to act as Remarketing Agent under the terms of this Seventeenth Supplemental Resolution.

(c) If the Remarketing Agent consolidates with, merges or converts into, or transfers all or substantially all of its assets (or, in the case of a bank, national banking association or trust company, its corporate assets) to, another corporation, the resulting, surviving or transferee corporation without any further act shall be the successor Remarketing Agent.

ARTICLE CIV

MISCELLANEOUS

Section 104.01. 2023F Subordinated Sinking Fund Account; Payments of Interest, Principal and Redemption Price and Defeasance While Credit Enhancement in Effect.

(a) An account is hereby established within the Subordinated Bonds Interest and Principal Fund to be designated the "Series 2023F Sinking Fund Account." The Treasurer shall deposit in the Series 2023F Sinking Fund Account the mandatory sinking fund account payments in the amounts, on the mandatory sinking fund account payment dates, set forth in

Section 101.05(a) and shall transfer such amounts to the Trustee on such date for application as provided in Section 104.01(b).

(b) On each mandatory sinking fund account payment date established for the 2023F Subordinated Bonds, the Trustee shall apply the mandatory sinking fund account payment required on that date to the redemption (or payment at maturity, as the case may be) of the 2023F Subordinated Bonds for which the mandatory sinking fund account payment has been made, upon the notice and in the manner provided in Section 101.08; provided that, at any time prior to giving such notice of such redemption, the Trustee shall, upon direction of the District, apply such moneys to the purchase of such 2023F Subordinated Bonds at public or private sale, as and when and at such prices (including brokerage and other charges, but excluding accrued interest) as the District may direct, except that the purchase price (excluding accrued interest) shall not exceed the par amount of such 2023F Subordinated Bonds. If, during the twelve-month period immediately preceding said mandatory sinking fund account payment date, the Trustee has purchased 2023F Subordinated Bonds with moneys in the Series 2023F Sinking Fund Account, or, during said period and prior to giving said notice of redemption, the District has deposited 2023F Subordinated Bonds with the Trustee, such 2023F Subordinated Bonds so purchased or deposited or redeemed shall be applied, to the extent of the full principal amount thereof, to reduce said mandatory sinking fund account payment. All 2023F Subordinated Bonds purchased or deposited pursuant to this subsection shall be cancelled and destroyed by the Trustee. All 2023F Subordinated Bonds purchased from the Series 2023F Sinking Fund Account or deposited by the District with the Trustee shall be allocated first to the next succeeding mandatory sinking fund account payment, then to the remaining mandatory sinking fund account payments as selected by the District.

(c) Any moneys remaining in the Series 2023F Sinking Fund Account after all 2023F Subordinated Bonds have been retired shall be returned to the District for any lawful District use.

(d) Notwithstanding the foregoing provisions of this Section 104.01 or Section 5.02 or any other provision of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023F Subordinated Bonds, the principal and Redemption Price of, and interest on, the 2023F Subordinated Bonds shall be paid solely (1) first, from moneys obtained from a drawing on the Credit Enhancement pursuant to Section 102.08(a) and (2) second, in the event moneys are not available pursuant to clause (1) for such purpose for any reason, from Available Moneys and moneys on deposit in the Series 2023F Sinking Fund Account shall be withdrawn by the Trustee and used solely for the purpose of reimbursing the Credit Provider for drawings under the Credit Enhancement. To the extent the Credit Provider honors a drawing under the Credit Enhancement for the purpose of paying the principal or Redemption Price of, or interest on, the 2023F Subordinated Bonds, the District shall receive a credit against its obligation to make deposits into the Subordinated Bonds Interest and Principal Fund and shall not be required to transfer funds to the Trustee in the amount of such drawing.

(e) Notwithstanding the provisions of Article X of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2023F Subordinated Bonds, 2023F Subordinated

Bonds shall not be deemed defeased or otherwise paid or satisfied unless such 2023F Subordinated Bonds are defeased with (1) moneys obtained from a drawing on the Credit Enhancement pursuant to Section 102.08(a), (2) Available Moneys or (3) Defeasance Securities acquired with moneys described in (1) or (2). Any Defeasance Securities used to defease 2023F Subordinated Bonds for which Credit Enhancement is in effect shall be not callable by the issuer thereof prior to maturity and shall mature no later than the earlier of (x) the first day upon which such 2023F Subordinated Bonds may be tendered or (y) the first day upon which such 2023F Subordinated Bonds may be redeemed. For purpose of Article X of the Subordinate Master Resolution, interest on the 2023F Subordinated Bonds shall be calculated based on an assumed interest rate equal to the Maximum Rate for periods for which the actual interest rate on the 2023F Subordinated Bonds cannot be determined.

Section 104.02. Form and Execution of 2023F Subordinated Bonds. The 2023F Subordinated Bonds, and the certificate of authentication and registration to be executed thereon, shall be in substantially the form set forth as Exhibit A to this Seventeenth Supplemental Resolution.

The 2023F Subordinated Bonds shall be executed in the name and on behalf of the District with the manual or facsimile signature of the President or Vice President of its Board of Directors. The 2023F Subordinated Bonds shall then be delivered to the Trustee for authentication by it. In case any officer who shall have signed any of the 2023F Subordinated Bonds shall cease to be such officer of the District before the 2023F Subordinated Bonds so signed shall have been authenticated or delivered by the Trustee or issued by the District, such 2023F Subordinated Bonds may nevertheless be authenticated, delivered and issued and, upon such authentication, delivery and issue, shall be as binding upon the District as though those who signed the same had continued to be such officer of the District, and also any 2023F Subordinated Bond may be signed on behalf of the District by such person as at the actual date of execution of such 2023F Subordinated Bond shall be the proper officer of the District although at the nominal date of such 2023F Subordinated Bond any such person shall not have been such officer of the District.

Only such of the 2023F Subordinated Bonds as shall bear thereon a certificate of authentication substantially in the form set forth in Exhibit A to this Seventeenth Supplemental Resolution, manually executed by an authorized signatory of the Trustee, shall be valid or obligatory for any purpose or entitled to the benefits of the Subordinate Master Resolution, and such certificate of the Trustee shall be conclusive evidence that the 2023F Subordinated Bonds so authenticated have been duly executed, authenticated and delivered hereunder and are entitled to the benefits of the Subordinate Master Resolution.

Section 104.03. Issuance of 2023F Subordinated Bonds. At any time after the adoption of this Seventeenth Supplemental Resolution, the District may execute and deliver the 2023F Subordinated Bonds in the aggregate principal amount set forth in the Sales Certificate. The Trustee shall authenticate and deliver the 2023F Subordinated Bonds upon written order of the District. The proceeds of the sale of the 2023F Subordinated Bonds shall be deposited and applied as set forth in the Sales Certificate.

Section 104.04. Use of Depository. Notwithstanding any provision of the Subordinate Master Resolution or this Seventeenth Supplemental Resolution to the contrary:

(a) The 2023F Subordinated Bonds shall be initially issued as provided in Section 100.02; provided, that 2023F Subordinated Bonds in the Direct Purchase Index Mode shall be issued in definitive certificated form registered in the name of the Holder thereof or as otherwise directed by the Holder. 2023F Subordinated Bonds in any other Interest Rate Mode shall be registered in the name of Cede & Co. or as otherwise directed by the Securities Depository and registered ownership thereof, or any portion thereof, may not thereafter be transferred except:

(i) To any successor of DTC or its nominee, or to any substitute depository designated pursuant to clause (ii) of this subsection (a) (“substitute depository”); provided that any successor of DTC or substitute depository shall be qualified under any applicable laws to provide the service proposed to be provided by it;

(ii) To any substitute depository not objected to by the Trustee, upon (1) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository or (2) a determination by the District that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; provided that any such substitute depository shall be qualified under any applicable laws to provide the services proposed to be provided by it; or

(iii) To any person as provided below, upon (1) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository; provided that no substitute depository which is not objected to by the Trustee can be obtained or (2) a determination by the District that it is in the best interests of the District to remove DTC or its successor (or any substitute depository or its successor) from its functions as depository.

(b) In the case of any transfer pursuant to clause (i) or clause (ii) of subsection 104.04(a) hereof, upon receipt of all outstanding 2023F Subordinated Bonds by the Trustee, together with a Certificate of the District to the Trustee, a single new 2023F Subordinated Bond shall be executed and delivered for each maturity of 2023F Subordinated Bonds then outstanding registered in the name of such successor or such substitute depository, or their nominees, as the case may be, all as specified in such Certificate of the District. In the case of any transfer pursuant to clause (iii) of subsection 104.04(a) hereof, upon receipt of all outstanding 2023F Subordinated Bonds by the Trustee together with a Certificate of the District to the Trustee, new 2023F Subordinated Bonds shall be executed and delivered in such denominations and registered in the names of such persons as are requested in such a Certificate of the District, subject to the limitations of Section 104.04(a) hereof, provided the Trustee shall not be required to deliver such new 2023F Subordinated Bonds within a period less than 60 days from the date of receipt of such a Certificate of the District. Subsequent to any transfer pursuant to clause (iii) of subsection 104.04(a) hereof, the 2023F Subordinated Bonds shall be transferred as provided in Article II of the Subordinate Master Resolution.

(c) In the case of partial redemption or an advance refunding of the 2023F Subordinated Bonds evidencing all or a portion of the principal maturing in a particular year, DTC shall make an appropriate notation on the 2023F Subordinated Bonds indicating the date and amounts of such reduction in principal. The Trustee shall incur no liability for the failure or any error by DTC in making such notation and the records of the Trustee shall be determinative of the outstanding principal amount of 2023F Subordinated Bonds.

(d) The District and the Trustee shall be entitled to treat the person in whose name any 2023F Subordinated Bond is registered as the Bondholder thereof for all purposes of the Subordinate Master Resolution and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the District; and the District and the Trustee shall have no responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with, any Beneficial Owners of the 2023F Subordinated Bonds. Neither the District nor the Trustee will have any responsibility or obligations, legal or otherwise, to the Beneficial Owners or to any other party including DTC or its successor (or substitute depository or its successor), except for the Holder of any 2023F Subordinated Bond.

(e) During any period that the Outstanding 2023F Subordinated Bonds are registered in the name of Cede & Co. or its registered assigns, the District and the Trustee (to the extent funds are provided to it by the District) shall cooperate with Cede & Co., as sole registered Bondholder, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2023F Subordinated Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made immediately available on the date they are due.

Section 104.05. Tax Covenants.

(a) The District shall at all times do and perform all acts and things permitted by law which are necessary or desirable in order to assure that interest paid on the 2023F Subordinated Bonds (or any of them) will be excluded from gross income for federal income tax purposes and shall take no action that would result in such interest not being excluded from gross income for federal income tax purposes. Without limiting the generality of the foregoing, the District agrees to comply with the provisions of the 2023 Tax Certificate. This covenant shall survive payment in full or defeasance of the 2023F Subordinated Bonds.

(b) Without limiting the generality of the foregoing, the District agrees that there shall be paid from time to time all amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Internal Revenue Code of 1986 (the "Code") and any temporary, proposed or final United States Treasury Regulations as may be applicable to the 2023F Subordinated Bonds from time to time (the "Rebate Requirement"). The District specifically covenants to pay or cause to be paid the Rebate Requirement as provided in the 2023 Tax Certificate to the United States of America from any Net Subordinate Revenues lawfully available to the District. This covenant shall survive payment in full or defeasance of the 2023F Subordinated Bonds. Capitalized terms in this Section not otherwise defined in the Subordinate Master Resolution or this Seventeenth Supplemental Resolution shall have the meanings ascribed to them in the 2023 Tax Certificate.

(c) The District shall establish, maintain and hold in trust a fund separate from any other fund established and maintained hereunder designated the Rebate Fund. The District shall cause to be deposited in the Rebate Fund the Rebate Requirement as provided in the 2023 Tax Certificate. Subject to the provisions of this Section, moneys held in the Rebate Fund are hereby pledged to secure payments to the United States government, and the District and the Bondholders shall have no rights in or claim to such moneys.

(d) In accordance with the 2023 Tax Certificate, the District shall remit part or all of the balance held in the Rebate Fund to the United States government as so directed.

(e) Notwithstanding any provision of this Section, if the District shall obtain an opinion of counsel of recognized national standing in the field of obligations the interest on which is excluded from gross income for purposes of federal income taxation to the effect that any specified action required under this Section is no longer required, or to the effect that some different action is required, to maintain the exclusion from gross income of the interest on the 2023F Subordinated Bonds under Section 103 of the Code, the District may rely conclusively on such opinion in complying with the provisions hereof, and the agreements and covenants hereunder shall be deemed to be modified to that extent without the necessity of an amendment of the Subordinate Master Resolution or this Seventeenth Supplemental Resolution or the consent at any time of the Bondholders.

Section 104.06. Rights of Credit Provider.

(a) Unless a Credit Provider Failure has occurred and is continuing, the Credit Provider shall be deemed the sole Holder of the 2023F Subordinated Bonds for the purpose of directing the Trustee with respect to the exercise of remedies and the declaration or waiver of Events of Default pursuant to Article IX of the Subordinate Resolution.

(b) Unless a Credit Provider Failure has occurred and is continuing, the Subordinate Master Resolution and this Seventeenth Supplemental Resolution shall not be amended without the written consent of the Credit Provider.

(c) Unless a Credit Provider Failure has occurred and is continuing, the District shall not appoint a successor Remarketing Agent or Trustee without the written consent of the Credit Provider.

Section 104.07. Limitations on Rights of Trustee.

(a) Proceeds of drawings on the Credit Enhancement and the Liquidity Facility and moneys on deposit in the Purchase Fund shall be used solely for the purposes set forth herein, and the Trustee shall have no lien on such proceeds or money, nor shall such proceeds or moneys be used for, the payment of the fees and/or expenses of the Trustee.

(b) The Trustee shall draw on the Credit Enhancement and the Liquidity Facility at the times and in the manner provided herein and therein and shall have no right to seek or obtain indemnification from the District, the Holders or any other party as a condition of making any such drawing.

Section 104.08. Terms of 2023F Subordinated Bonds Subject to the Subordinate Master Resolution.

(a) Except as in this Seventeenth Supplemental Resolution expressly provided, every term and condition contained in the Subordinate Master Resolution shall apply to this Seventeenth Supplemental Resolution and to the 2023F Subordinated Bonds with the same force and effect as if the same were herein set forth at length, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Seventeenth Supplemental Resolution.

(b) This Seventeenth Supplemental Resolution and all the terms and provisions herein contained shall form part of the Subordinate Master Resolution as fully and with the same effect as if all such terms and provisions had been set forth in the Subordinate Master Resolution. The Subordinate Master Resolution is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended hereby.

Section 104.09. Resolution of Trust to Remain in Effect. Save and except as supplemented by this Seventeenth Supplemental Resolution, the Subordinate Master Resolution shall remain in full force and effect.

Section 104.10. Notice to Rating Agencies. (a) The District shall provide or cause to be provided prompt notice of the following events to the Rating Agencies, if any:

(1) the expiration, termination, extension or substitution of any Credit Enhancement or Liquidity Facility relating to the 2023F Subordinated Bonds;

(2) any optional redemption (as a whole or in part), mandatory purchase or acceleration of the 2023F Subordinated Bonds;

(3) any Conversion of the 2023F Subordinated Bonds;

(4) any amendment, modification or supplement of or to the Subordinate Master Resolution or any Credit Enhancement or Liquidity Facility relating to the 2023F Subordinated Bonds (which notice shall be provided or caused to be provided at least ten days prior to the effective date thereof);

(5) any change in the party instructed to draw on any Credit Enhancement or Liquidity Facility relating to the 2023F Subordinated Bonds;

(6) any removal or resignation of the Trustee or the Remarketing Agent; or

(7) any legal defeasance of the 2023F Subordinated Bonds.

(b) The District and the Trustee shall provide or cause to be provided to the Rating Agencies any information reasonably requested by such Rating Agency to maintain its rating, if any, on the 2023F Subordinated Bonds.

Section 104.11. Continuing Disclosure. The District hereby covenants and agrees that it will comply with and carry out all of the provisions of any Continuing Disclosure Agreement executed in connection with the 2023F Subordinated Bonds. Notwithstanding any other provision of the Subordinate Master Resolution or this Seventeenth Supplemental Resolution, failure of the District to comply with any such Continuing Disclosure Agreement shall not be considered an Event of Default; however, the Trustee shall, at the written request of any Participating Underwriter (as defined in any such Continuing Disclosure Agreement) or the Holders of at least 25% aggregate principal amount of Outstanding 2023F Subordinated Bonds upon receipt of indemnity satisfactory to the Trustee or any Holder of 2023F Subordinated Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Section. For purposes of this Section, “Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2023F Subordinated Bonds (including persons holding 2023F Subordinated Bonds through nominees, depositories or other intermediaries).

Section 104.12. Designation of Credit Provider and Liquidity Provider Reimbursement Obligations as Parity Subordinated Debt; Authorization and Issuance of Revolving Notes. For the avoidance of doubt, the District hereby designates as Parity Subordinated Debt, secured by the pledge of Net Subordinated Revenues made by the District pursuant to Section 5.01 of the Subordinate Master Resolution on the same basis as the Subordinated Bonds and all other Parity Subordinated Debt as provided in the Subordinate Master Resolution, any and all obligations of the District pursuant to any Credit Enhancement, Liquidity Facility, or Reimbursement Agreement to reimburse each Credit Provider or Liquidity Provider for drawings or other advances on or pursuant to the related Credit Enhancement or Liquidity Facility, including, without limitation, any accrued interest on such drawings or advances, all as set forth in the related Credit Enhancement, Liquidity Facility, or Reimbursement Agreement (collectively, the “Reimbursement Obligations”). In order to more fully evidence the Reimbursement Obligations as Parity Subordinated Debt, the Board hereby authorizes the issuance from time to time of one or more revenue bonds pursuant to the Act in substantially the form of and with the terms stated in the form of the revolving note set forth as Exhibit B to this Seventeenth Supplemental Resolution (each a “Revolving Note”), but the delivery of such Revolving Note shall not be required to secure such Reimbursement Obligations as Parity Subordinated Debt. At the time of each delivery of a Credit Enhancement or Liquidity Facility pursuant to the terms of this Seventeenth Supplemental Resolution, the District may deliver a Revolving Note to the related Credit Provider or Liquidity Provider with a stated amount equal to the Available Amount under such Credit Enhancement or Liquidity Facility and with all blanks and brackets filled in as appropriate and with such other changes as may be necessary or appropriate to conform to the terms of such Credit Enhancement, Liquidity Facility, or Reimbursement Agreement.

Approved: May 18, 2023

INTRODUCED: DIRECTOR ROSE				
SECONDED: DIRECTOR BUI-THOMPSON				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

EXHIBIT A

FORM OF 2023F SUBORDINATED BOND

[TO BE CONFORMED TO SALES CERTIFICATE]

No. R-__ \$ _____

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE REFUNDING BOND
2023 SERIES F**

<u>Maturity</u>	<u>Interest Per Annum</u>	<u>Date</u>	<u>CUSIP</u>
August 15, 20__	Variable	_____, 2023	

REGISTERED OWNER: _____

PRINCIPAL AMOUNT: _____ DOLLARS

SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district duly organized and existing under and pursuant to the laws of the State of California (the “District”), for value received, hereby promises to pay (but only out of the Net Subordinated Revenues hereinafter referred to) to the registered owner named above or registered assigns, on the maturity date specified above, the principal sum specified above together with interest thereon from _____, 2023, until the principal hereof shall have been paid, at the interest rates per annum determined as set forth below, payable on each Interest Payment Date, as defined below. The principal of and premium, if any, and interest on the 2023F Subordinated Bonds, as defined below, shall be payable in lawful money of the United States of America. Interest on the 2023F Subordinated Bonds shall be paid on each Interest Payment Date, as defined below, by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode, by check mailed on the date on which due to the Holders of the 2023F Subordinated Bonds at the close of business on the Record Date for the 2023F Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2023F Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2023F Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2023F Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of \$1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2023F Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2023F Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2023F Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2023F Subordinated Bonds registered in the name of the Securities Depository

(or its nominee), interest on any such 2023F Subordinated Bond shall be payable only upon surrender of such 2023F Subordinated Bond at the office of the Paying Agent. The principal of and premium, if any, on each 2023F Subordinated Bond shall be payable on the Principal Payment Date of such 2023F Subordinated Bond upon surrender thereof at the office of the Paying Agent, subject to the terms of the Seventeenth Supplemental Resolution, as defined below.

This Bond is one of a duly authorized issue of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds (hereinafter called the “Subordinated Bonds”) designated as Subordinated Electric Revenue Refunding Bonds, 2023 Series F (the “2023F Subordinated Bonds”). The Subordinated Bonds are not limited in aggregate principal amount, except as otherwise provided in the Subordinate Resolution hereinafter mentioned, and consist or may consist of one or more series of varying denominations, dates, maturities, interest rates and other provisions, as in said Subordinate Resolution provided, all issued and to be issued pursuant to the provisions of the Revenue Bond Law of 1941 as made applicable by Article 6a of Chapter 6, Division 6, of the California Public Utilities Code and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (hereinafter called the “Act”). This 2023F Subordinated Bond is issued pursuant to Resolution No. 85-11-1 of the District, adopted November 7, 1985, providing for the issuance of the Subordinated Bonds, as amended and restated by Resolution No. 01-06-10 of the District, adopted on June 21, 2001 (as amended and restated, the “Subordinate Master Resolution”), and as supplemented and amended by resolutions to date, including by a Seventeenth Supplemental Resolution, adopted May 18, 2023, authorizing the issuance of the 2023F Subordinated Bonds (said resolution as amended, restated and supplemented and the Seventeenth Supplemental Resolution being hereinafter collectively called the “Subordinate Resolution”). Reference is hereby made to the Subordinate Resolution and the Act for a description of the terms on which the Subordinated Bonds are issued and to be issued, the provisions with regard to the nature and extent of the Revenues, as that term is defined in the Subordinate Resolution, and the rights of the registered owners of the Subordinated Bonds; and all the terms of the Subordinate Resolution and the Act are hereby incorporated herein and constitute a contract between the District and the registered owner from time to time of this 2023F Subordinated Bond, and to all the provisions thereof the registered owner of this 2023F Subordinated Bond, by its acceptance hereof, consents and agrees. Additional bonds may be issued on a parity with the Subordinated Bonds of this authorized issue, but only subject to the conditions and limitations contained in the Subordinate Resolution. Capitalized terms used, but not defined herein shall have the meaning given such terms in the Subordinate Resolution.

The Subordinated Bonds and the interest thereon, together with the Parity Subordinated Debt (as defined in the Subordinate Resolution) heretofore or hereafter issued by the District, and the interest thereon, are payable from, and are secured by a charge and lien on, the Net Subordinated Revenues derived by the District from the Electric System (as those terms are defined in the Subordinate Resolution). The District covenants and warrants that for the payment of the Subordinated Bonds, and interest thereon, there have been created and will be maintained by the District special funds into which there shall be deposited from Net Subordinated Revenues available for that purpose sums sufficient to pay the principal of, and interest on, all of the Subordinated Bonds, as such principal and interest become due, and as an

irrevocable charge the District has allocated Net Subordinated Revenues to such payment, all in accordance with the Subordinate Resolution.

The Subordinated Bonds, including the 2023F Subordinated Bonds, are expressly subordinated in right of payment to the prior payment in full of all Parity Bonds, as that term is defined in Resolution No. 6649 of the District, adopted on January 7, 1971 (the “Senior Bond Resolution”), including the District’s Electric Revenue Bonds. The holder of this 2023F Subordinated Bond, by acceptance hereof, authorizes and directs the Trustee on its behalf to take such action as may be necessary or appropriate to effectuate the subordination provided in this paragraph and in the Subordinate Resolution and appoints the Trustee its attorney-in-fact for any and all such purposes.

The Subordinated Bonds are special obligations of the District, and are payable, both as to principal and interest, out of the Net Subordinated Revenues pertaining to the Electric System, and not out of any other fund or moneys of the District. No holder of this Bond shall ever have the right to compel any exercise of the taxing power of the District to pay this Bond or the interest hereon.

The term of the 2023F Subordinated Bonds will be divided into consecutive Interest Periods during each of which the 2023F Subordinated Bonds shall bear interest at a Flexible Rate or Flexible Rates, a Daily Rate, a Weekly Rate, a Direct Purchase Index Rate, a Term Rate, an Index Rate or a Fixed Rate or Fixed Rates. The 2023F Subordinated Bonds shall initially bear interest at a Term Rate for an initial Term Rate Period ending on [_____, 20__]. The Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2023F Subordinated Bonds thereafter may be changed from time to time as provided in the Subordinate Resolution. As hereinafter described, the 2023F Subordinated Bonds are subject to mandatory purchase on any Conversion Date.

Interest on the 2023F Subordinated Bonds is to be paid on: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2023F Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2023F Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day specified (a) in the Sales Certificate in connection with the initial issuance of the 2023F Subordinated Bonds or (b) in writing by the District in connection with the Conversion Date to such Term Rate Mode or Fixed Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the applicable Reimbursement Agreement or Liquidity Facility (each an “Interest Payment Date”).

The interest rate on the 2023F Subordinated Bonds shall be determined as follows:

Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the

provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and in Section 100.04 of the Seventeenth Supplemental Resolution, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2023F Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2023F Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2023F Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2023F Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2023F Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2023F Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023F Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period.

During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. The Term Rate shall be the minimum rate which, in the sole judgment of the Remarketing Agent, would result in a sale of such 2023F Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

Fixed Rates. The Remarketing Agent shall determine the Fixed Rate for 2023F Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2023F Subordinated Bonds will have Serial Maturity Dates in accordance with Section 100.11(b)(v) of the Seventeenth Supplemental Resolution). Except as set forth in Section 100.11(b)(v) of the Seventeenth Supplemental Resolution, the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2023F Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 100.11(b)(v) of the Seventeenth Supplemental Resolution, the Fixed Rate so established shall remain in effect until the Maturity Date of such 2023F Subordinated Bonds.

Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2023F Subordinated Bonds (other than 2023F Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2023F Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2023F Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2023F Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2023F Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2023F Subordinated Bonds.

For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2023F Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

For 2023F Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2023F Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

Direct Purchase Index Rates.

(a) During each Direct Purchase Index Rate Period, the 2023F Subordinated Bonds shall, subject to subparagraph (b) below, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2023F Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2023F Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2023F Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2023F Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 102.02(b) thereof, but subject to Section 100.04(c) and Section 100.09(b)(ii) and (iii) thereof, from and after any Taxable Date, the interest rate on 2023F Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 102.02(b) thereof, but subject to Section 100.04(c) and Section 100.09(b)(iii) thereof, from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2023F Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2023F Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2023F Subordinated Bonds exceeds the Maximum Rate for such 2023F Subordinated Bonds, then (A) such 2023F Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2023F Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2023F Subordinated Bonds as otherwise calculated pursuant to the above provisions and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2023F Subordinated Bonds as otherwise calculated pursuant to the above provisions is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2023F Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2023F Subordinated Bonds are redeemed or tendered for purchase in accordance with the Seventeenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2023F Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything in the Subordinate Resolution to the contrary, but subject to Section 100.04(c) and Section 100.09(b)(i), (ii) and (iii) thereof, during any Amortization Period, the 2023F Subordinated Bonds shall bear interest at the Bank Rate.

Index Rates. During each Index Rate Period, the 2023F Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2023F Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2023F Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2023F Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2023F Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2023F Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2023F Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2023F Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the District shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect

during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2023F Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2023F Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Optional Tenders of 2023F Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 102.06, the Beneficial Owners of 2023F Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2023F Subordinated Bonds (or portions of those 2023F Subordinated Bonds, provided that no 2023F Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode. The 2023F Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2023F Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2023F Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2023F Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2023F Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

The term “Mandatory Purchase Date” means: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such Flexible Rate Bond, (ii) with respect to 2023F Subordinated Bonds in the Term Rate Mode, the first Business Day following the last day of each Term Rate Period applicable to such 2023F Subordinated Bonds, (iii) with respect to any 2023F Subordinated Bonds, any Conversion Date applicable to such 2023F Subordinated Bond (except for any Conversion Date in respect of a conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode) or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 100.11 not failed to occur (except for any such date in respect of a proposed conversion from the Daily Mode to the Weekly Mode or from the Weekly Mode to the Daily Mode), (iv) with respect to any 2023F Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2023F Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility supporting such 2023F Subordinated Bonds, (vi) with respect to any 2023F Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility, which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023F Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee’s receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023F Subordinated Bonds and in no event later than the Business Day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2023F Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2023F Subordinated Bonds (other than interest on 2023F Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2023F Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee’s receipt of such notice, (viii) with respect to 2023F Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee’s receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023F Subordinated Bonds, (ix) with respect to 2023F Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2023F Subordinated Bonds, and (x) with respect to 2023F Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Notwithstanding the above paragraphs and anything to the contrary in the Seventeenth Supplemental Resolution, in the event the 2023F Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the

Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2023F Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2023F Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), in which case the 2023F Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2023F Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2023F Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2023F Subordinated Bonds may be subject to redemption or purchase at the sole option of the District at any time without notice as and to the extent provided in the Continuing Covenant Agreement.

Optional Redemption of Flexible Rate Bonds. 2023F Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2023F Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Optional Redemption of 2023F Subordinated Bonds in the Daily Mode or the Weekly Mode. 2023F Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023F Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Optional Redemption of 2023F Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

2023F Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2023F Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2023F Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2023F Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

2023F Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2023F Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2023F Subordinated Bonds so changed to a

Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2023F Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Optional and Mandatory Redemption of 2023F Subordinated Bonds in the Direct Purchase Index Mode.

Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2023F Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2023F Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

2023F Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Mandatory Sinking Fund Account Redemption of 2023F Subordinated Bonds. The 2023F Subordinated Bonds [maturing on August 15, 20[___],] shall be subject to redemption prior to maturity from mandatory sinking fund account payments for such 2023F Subordinated Bonds on August 15 of each year on and after August 15, 20__, at a Redemption Price equal to the principal amount of such 2023F Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The following shall be the mandatory sinking fund account payments for the 2023F Subordinated Bonds [maturing on August 15, 20[___]]. Such mandatory sinking fund account payments shall be due on August 15 of the years set forth in the following table in the respective amounts set forth opposite such years in said table:

Year	Amount	Year	Amount
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* Payment at Maturity

Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2023F Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2023F Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023F Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2023F Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2023F Subordinated Bonds to be redeemed, and shall also state that the interest on the 2023F Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023F Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2023F Subordinated Bonds to be redeemed. Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption. Notwithstanding the foregoing, notice of redemption shall not be required for 2023F Subordinated Bonds redeemed on a Mandatory Purchase Date.

This 2023F Subordinated Bond is transferable by the registered owner hereof, in person or by the attorney of such owner duly authorized in writing, at the principal office of the Trustee but only in the manner, subject to the limitations and upon payment of the charges provided in the Subordinate Resolution, and upon surrender and cancellation of this 2023F Subordinated Bond. Upon such transfer a new fully registered Bond or Subordinated Bonds without coupons, of authorized denomination or denominations, for the same aggregate principal amount and maturity will be issued to the transferee in exchange herefor.

The District and the Trustee may deem and treat the registered owner hereof as the absolute owner hereof for all purposes, and the District and the Trustee shall not be affected by any notice to the contrary.

To the extent this 2023F Subordinated Bond constitutes a Liquidity Facility Bond, the terms and conditions of the Seventeenth Supplemental Resolution with respect to Liquidity Facility Bonds shall control this 2023F Subordinated Bond.

The rights and obligations of the District and of the holders and registered owners of the Subordinated Bonds may be modified or amended at any time in the manner, to the extent, and upon the terms provided in the Subordinate Resolution, provided that no such modification or amendment shall (i) extend the fixed maturity of any Subordinated Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce the amount of any premium payable upon the redemption thereof, without the consent of the holder of each Subordinated Bond so affected, or (ii) reduce the percentage of Subordinated Bonds required for the affirmative vote or written consent to an amendment or modification, without the consent of the holders of all the Subordinated Bonds then outstanding, or (iii) without its written consent thereto, modify any of the rights or obligations of the Trustee.

It is hereby certified and recited that any and all acts, conditions and things required to exist, to happen and to be performed, precedent to and in the incurring of the indebtedness evidenced by this 2023F Subordinated Bond, and in the issuing of this 2023F Subordinated Bond, do exist, have happened and have been performed in due time, form and manner, as required by the Constitution and statutes of the State of California, and that this 2023F Subordinated Bond, together with all other indebtedness of the District pertaining to the Electric System, is within every debt and other limit prescribed by the Constitution and the statutes of the State of California, and is not in excess of the amount of Subordinated Bonds permitted to be issued under the Subordinate Resolution.

This 2023F Subordinated Bond shall not be entitled to any benefit under the Subordinate Resolution, or become valid or obligatory for any purpose, until the certificate of authentication hereon endorsed shall have been signed by the Trustee. To the extent of any conflict or inconsistency between any provisions contained in this 2023F Subordinated Bond and the Subordinate Resolution, the provisions of the Subordinate Resolution shall control.

IN WITNESS WHEREOF, SACRAMENTO MUNICIPAL UTILITY DISTRICT has caused this 2023F Subordinated Bond to be executed in its name and on its behalf by the facsimile signature of its President of its Board of Directors and by the facsimile signature of its Treasurer and countersigned by the facsimile signature of its Secretary, and the seal of the District to be reproduced hereon, by facsimile and this 2023F Subordinated Bond to be dated as of the date first written above.

SACRAMENTO MUNICIPAL UTILITY
DISTRICT

By _____
President of the Board of Directors

By _____
Treasurer of the District

(SEAL)

Countersigned:

Secretary of the District

CERTIFICATE OF AUTHENTICATION AND REGISTRATION

This is one of the Subordinated Bonds described in the within-mentioned Subordinate Resolution and registered on the date set forth below.

Dated: _____, 2023

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
as Trustee

By _____
Authorized Officer

ASSIGNMENT

For value received _____ hereby sell, assign and transfer unto _____ whose taxpayer identification number is _____ the within-mentioned Bond and hereby irrevocably constitute and appoint _____ attorney, to transfer the same on the books of the District at the office of the Trustee, with full power of substitution in the premises.

NOTE: The signature to this Assignment must correspond with the name on the face of the within Registered Bond in every particular, without alteration or enlargement or any change whatsoever.

Dated:

Signature Guaranteed by:

NOTE: Signature must be guaranteed by an eligible guarantor institution

EXHIBIT B

FORM OF REVOLVING NOTE

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE REFUNDING BONDS
2023 SERIES F**

[Delivery Date] \$ _____

The Sacramento Municipal Utility District (the “District”), for value received, hereby promises to pay to the order of [Bank] (the “Bank”), pursuant to that certain _____ dated as of _____ (the “Agreement”), between the District and the Bank, at the office of the Bank at _____, the aggregate unpaid principal amount of all Reimbursement Obligations (as defined in the Agreement) pursuant to the Agreement on the dates and in the amounts provided for in the Agreement.

The District promises to pay interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. All payments of principal and interest shall be made in any coin or currency of the United States of America which at the time of payment is legal tender for public and private debts in immediately available funds. All capitalized terms used herein and not otherwise defined herein shall have the meanings specified in the Agreement.

This Revolving Note is a Revolving Note as referred to in Section 104.12 of Resolution No. 01-06-10 of the District adopted June 21, 2001, amending and restating Resolution No. 85-11-1 of the District adopted November 7, 1985, as amended and supplemented, including as supplemented by Resolution No. _____ of the District adopted May 18, 2023 (the “Seventeenth Supplemental Resolution”) (collectively, the “Subordinate Master Resolution”). This Revolving Note evidences the Reimbursement Obligations owed to the Bank by the District pursuant to the Agreement which have been designated by the District as, and constitute, Parity Subordinated Debt under and as defined in the Subordinate Master Resolution and, as such Parity Subordinated Debt, is entitled to the benefits afforded Parity Subordinated Debt and the holders thereof pursuant to the Subordinate Master Resolution and is secured by a lien on the Net Subordinated Revenues as more fully set forth in and subject to the terms of the Subordinate Master Resolution. As provided in the Agreement, the Reimbursement Obligations and this Revolving Note are subject to prepayment, in whole or in part, in accordance with the terms of the Agreement.

The Bank agrees, by acceptance of this Revolving Note, that it will make a notation on the schedule attached hereto of all Reimbursement Obligations evidenced hereby and all principal payments and prepayments made hereunder and of the date to which interest hereon has been paid, all as provided in the Agreement; *provided, however*, that the failure to make any such notation or any error in such notation shall not limit or otherwise affect the obligation of the District hereunder with respect to payments of principal of and interest on this Revolving Note.

This Revolving Note is authorized by the District to be issued to provide for the payment of the principal of and interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. This Revolving Note is issued under and pursuant to and in full compliance with the Subordinate Master Resolution and the Seventeenth Supplemental Resolution.

It is hereby certified that all conditions, acts and things essential to the validity of this Revolving Note exist, have happened and have been done and that every requirement of law affecting the issuance hereof has been duly complied with.

IN WITNESS WHEREOF, SMUD, has caused this Revolving Note to be executed by an authorized officer of SMUD and this Revolving Note to be dated as of date set forth above.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
Name: _____
Title: _____

SCHEDULE FOR REVOLVING NOTE
DATED _____
BY SACRAMENTO MUNICIPAL UTILITY DISTRICT
PAYABLE TO [BANK]

<u>Date</u>	<u>Amount of Drawing or Advance Made</u>	<u>Amount of Principal Paid</u>	<u>Date to Which Interest Paid</u>	<u>Due Date</u>	<u>Notation Made by</u>
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**RESOLUTION NO. 23-05-11 OF
THE BOARD OF DIRECTORS OF
SACRAMENTO MUNICIPAL UTILITY DISTRICT
AUTHORIZING THE EXECUTION AND DELIVERY OF ONE OR MORE
CONTRACTS OF PURCHASE, OFFICIAL STATEMENTS, CONTINUING
DISCLOSURE AGREEMENTS, STANDBY BOND PURCHASE AGREEMENTS, FEE
AGREEMENTS, REMARKETING AGREEMENTS, DISTRIBUTION OF OFFICIAL
STATEMENTS, AND CERTAIN OTHER ACTIONS RELATING TO THE ISSUANCE
AND SALE OF ONE OR MORE SERIES OR SUBSERIES OF THE DISTRICT'S
ELECTRIC REVENUE BONDS AND/OR SUBORDINATED ELECTRIC REVENUE
BONDS, THE REFUNDING OF ALL OR A PORTION OF ONE OR MORE SERIES OF
THE DISTRICT'S ELECTRIC REVENUE BONDS AND/OR SUBORDINATED
ELECTRIC REVENUE BONDS, THE TERMINATION OF ONE OR MORE INTEREST
RATE SWAP AGREEMENTS AND CERTAIN OTHER MATTERS RELATING
THERE TO**

BE IT RESOLVED, by the Board of Directors of the Sacramento Municipal Utility District (the "District"), as follows:

Section 1. Sale of Bonds. One or more series or subseries of the District's Electric Revenue Bonds and/or Subordinated Electric Revenue Bonds (collectively, the "Bonds"), are hereby authorized to be sold to the underwriters thereof in one or more negotiated sales at the prices and otherwise upon the terms and conditions determined on the sale dates thereof by the Chief Executive Officer and General Manager, any Member of the Executive Committee, the Treasurer, the Secretary or the Chief Financial Officer or the designee of any such officer (each an "Authorized Officer"), as specified in one or more Sales Certificates relating to the Bonds (the "Sales Certificates") authorized under the supplemental resolutions authorizing the issuance of the Bonds adopted by the Board of Directors of the District on the date hereof.

Section 2. Contracts of Purchase. The forms of Contracts of Purchase with respect to the Bonds (the "Contracts of Purchase") between the District and the underwriters named therein (the "Underwriters"), in the forms submitted to this meeting are hereby approved. Any Authorized Officer, acting alone, is authorized and directed to execute and deliver one or more Contracts of Purchase in substantially such forms for the Bonds or any series or subseries thereof on behalf of the District, subject to such additions thereto and changes therein as any Authorized Officer shall approve after consultation with the District's counsel (such approval to be conclusively evidenced by the execution of such Contracts of Purchase).

Section 3. Official Statements. The Official Statements of the District relating to the Bonds (the "Official Statements") in substantially the forms submitted to this meeting are hereby approved. Any Authorized Officer, acting alone, is authorized and directed to execute and deliver the Official Statements relating to the Bonds in substantially such forms on behalf of the District, subject to such additions thereto and changes therein as any Authorized Officer shall approve after consultation with the District's counsel and subject to such further

changes as may be consistent with the Sales Certificates (such approval to be conclusively evidenced by the execution of such Official Statements). The Underwriters are authorized to distribute the Official Statements in preliminary form to persons who may be interested in the purchase of the Bonds and the Official Statements in final form to purchasers of the Bonds.

Section 4. Continuing Disclosure Agreements. The forms of Continuing Disclosure Agreements relating to the Bonds between the District and U.S. Bank Trust Company, National Association, as dissemination agent (the “Continuing Disclosure Agreements”) in the forms attached to the Official Statements submitted to this meeting are hereby approved. Any Authorized Officer, acting alone, is authorized and directed to execute and deliver the Continuing Disclosure Agreements in substantially such forms on behalf of the District, subject to such additions thereto and changes therein as any Authorized Officer shall approve after consultation with the District’s counsel (such approval to be conclusively evidenced by the execution of such Continuing Disclosure Agreements).

Section 5. Bond Insurance. Any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to procure bond insurance for all or any portion of the Bonds including without limitation one or more commitments for a bond insurance policy and one or more insurance agreements; provided that such insurance and such agreements and documents are determined by any Authorized Officer to be reasonable under the circumstances and to be consistent with the provisions and intent of this resolution. The power to make such determination is hereby delegated to each Authorized Officer and shall be conclusively evidenced by the execution and delivery of the insurance agreements and insurance commitments. Any actions heretofore taken by any Authorized Officer in furtherance of this Section are hereby ratified, confirmed and approved.

Section 6. Termination of Interest Rate Swap Agreements. The District previously entered into interest rate swap agreements (the “Interest Rate Swaps”) to hedge potential interest rate exposure relating to the refunding of its Electric Revenue Bonds anticipated to be refunded by the Bonds (the “Refunded Bonds”). Any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to terminate all or a portion of one or more of the Interest Rate Swaps in connection with the issuance of the Bonds and the refunding of the Refunded Bonds. In the event that one or more of the Interest Rate Swaps is terminated on the condition that the issuance of the applicable Bonds has occurred (or will occur simultaneously with the settlement of such Interest Rate Swap termination) and/or the applicable Refunded Bonds have been refunded (or will be refunded simultaneously with the settlement of such Interest Rate Swap termination) and such issuance and/or refunding does not occur, then any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to reinstate all or a portion of the applicable terminated Interest Rate Swap; this authorization shall include, but not be limited to, adjusting any fixed rate specified in, and making other changes to the terms of, the applicable Interest Rate Swap in connection with the reinstatement of all or a portion of the applicable terminated Interest Rate Swap.

In the event that all or a portion of the applicable Interest Rate Swap is reinstated and/or adjusted as described above, the Board of Directors of the District hereby finds and determines, pursuant to Section 5922 of the California Government Code, that due consideration has been given for the creditworthiness of the counterparty to such Interest Rate Swap, including any related guarantee of, or other credit support for, the obligations of such counterparty, if applicable, and that such Interest Rate Swap is designed to reduce the amount or duration of rate, spread or similar risk or result in a lower cost of borrowing when used in combination with the issuance of the applicable Bonds, the applicable Refunded Bonds, and/or one or more series of other revenue bonds to be issued by the District in the future for the purpose of refunding all or a portion of the applicable Refunded Bonds. To the extent that any Interest Rate Swap so reinstated and/or adjusted as described above is inconsistent or in conflict with the District's Resolution No. 99-12-14, adopted on December 16, 1999 (the "Swap Policy") or any other swap policies of the District, the inconsistent or conflicting provisions of the Swap Policy or such other swap policies of the District are hereby waived and shall not be applicable to any Interest Rate Swap reinstated and/or adjusted as described above.

Section 7. Credit Facilities and/or Liquidity Facilities. The form of one or more Standby Bond Purchase Agreements relating to one or more series or subseries of the Bonds (the "Standby Bond Purchase Agreements") between the District and one or more liquidity facility providers to be named therein (the "Liquidity Facility Providers"), in the form submitted to this meeting is hereby approved. The form of one or more Fee Agreements relating to the Standby Bond Purchase Agreements (the "Fee Agreements") between the District and the Liquidity Facility Providers named therein, in the form submitted to this meeting is hereby approved. Any Authorized Officer, acting alone, is authorized and directed to execute and deliver one or more Standby Bond Purchase Agreements and one or more Fee Agreements in substantially such forms on behalf of the District, subject to such additions thereto and changes therein as any Authorized Officer shall approve after consultation with the District's counsel (such approval to be conclusively evidenced by the execution of such Standby Bond Purchase Agreements and Fee Agreements). Additionally, any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to procure such other letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument or liquidity instrument providing for or securing the payment of the principal of and interest on all or any portion of the Bonds and/or providing for the payment of the purchase price of tendered Bonds, including without limitation one or more reimbursement agreements, standby purchase agreements, or other credit or liquidity provider agreements and any term sheets, fee letters or fee agreements therefor; provided that such credit facilities and/or liquidity facilities and such agreements and documents are determined by any Authorized Officer to be reasonable under the circumstances and to be consistent with the provisions and intent of this resolution. The power to make such determination is hereby delegated to each Authorized Officer and shall be conclusively evidenced by the execution and delivery of such agreements, term sheets, fee letters and/or fee agreements. Any actions heretofore taken by any Authorized Officer in furtherance of this Section are hereby ratified, confirmed and approved.

Section 8. Remarketing Agents and Remarketing Agreements. The form of one or more Remarketing Agreements relating to one or more series or subseries of the Bonds

(the “Remarketing Agreements”), in the form submitted to this meeting is hereby approved. Any Authorized Officer, acting alone, is authorized and directed to execute and deliver one or more Remarketing Agreements in substantially such form on behalf of the District, subject to such additions thereto and changes therein as any Authorized Officer shall approve after consultation with the District’s counsel (such approval to be conclusively evidenced by the execution of the Remarketing Agreements). Additionally, any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to appoint one or more remarketing agents for all or any portion of the Bonds, including without limitation one or more remarketing agreements; provided that such agreements and documents are determined by any Authorized Officer to be reasonable under the circumstances and to be consistent with the provisions and intent of this resolution. The power to make such determination is hereby delegated to each Authorized Officer and shall be conclusively evidenced by the execution and delivery of such agreements. Any actions heretofore taken by any Authorized Officer in furtherance of this Section are hereby ratified, confirmed and approved.

Section 9. Other Related Actions. The Authorized Officers and other officers of the District are hereby authorized and directed to do any and all things and to negotiate, execute, deliver and perform any and all agreements and documents (including one or more escrow agreements for the purpose of refunding outstanding bonds) which they deem necessary or advisable in order to consummate the issuance, sale and delivery of the Bonds, to provide for credit enhancement of, or liquidity for, the Bonds, and to effectuate the purposes of this resolution and the transactions contemplated by this resolution, the supplemental resolutions authorizing the issuance of the Bonds, the Sales Certificates, and the documents approved hereby, including any subsequent amendments, directions, waivers or consents entered into or given in accordance with such documents, and that any actions heretofore taken and any agreements and documents heretofore executed and delivered by the officers of the District to consummate the issuance, sale and delivery of the Bonds, to provide for credit enhancement of, or liquidity for, the Bonds, and to effect the purpose of these resolutions and the transactions contemplated thereby are hereby ratified and confirmed.

Approved: May 18, 2023

INTRODUCED: DIRECTOR ROSE				
SECONDED: DIRECTOR BUI-THOMPSON				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
SANBORN	X			
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT
[\$[PAR] Electric Revenue Refunding Bonds, 2023 Series K

CONTRACT OF PURCHASE

[SALE DATE]

Honorable Board of Directors
Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899

Dear Directors:

The undersigned Barclays Capital Inc., [UNDERWRITING GROUP TO COME] (herein collectively called the “Underwriters”), acting for and on behalf of themselves, offer to enter into this Contract of Purchase (the “Contract of Purchase”) with the Sacramento Municipal Utility District (the “District”) which, upon the District’s acceptance, will be binding upon the District and upon the Underwriters. Barclays Capital Inc., has been duly authorized to execute this Contract of Purchase and to act hereunder by and based on representations made to it under an Agreement Among Underwriters dated _____, 2023 on behalf of the Underwriters as the Senior Managing Underwriter (the “Senior Underwriter”). This offer is made subject to the District’s acceptance on or before 5:00 p.m., Sacramento time, on the date hereof, and if not so accepted, will be subject to withdrawal by the Underwriters upon notice delivered to the District at any time prior to the acceptance hereof by the District.

1. Purchase, Sale and Delivery of the Bonds. (a) Subject to the terms and conditions and in reliance upon the representations, warranties and agreements herein set forth, the Underwriters, jointly and severally, hereby agree to purchase from the District, and the District hereby agrees to sell to the Underwriters, all (but not less than all) of the [\$[PAR] aggregate principal amount of the Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2023 Series K (the “Bonds”), dated [CLOSING DATE], bearing interest (payable on the dates set forth in the Official Statement (as hereinafter defined) of the District relating to the Bonds) in each year until maturity or earlier redemption at the rates per annum and maturing on the dates and in the amounts set forth in the Official Statement. The purchase price for the Bonds shall be \$[PURCHASE PRICE] (consisting of the principal amount of the Bonds of \$[PAR] plus [net] original issue premium of \$[OIP] and minus an Underwriters’ discount of \$ [UWD]).

(b) The Bonds shall be substantially in the form described in, shall be issued and secured under the provisions of, and shall be payable as provided in, Resolution No. 6649, adopted by the Board of Directors of the District on January 7, 1971 (the “Master Resolution”), as heretofore amended and supplemented, including the amendments and supplements thereto made by Resolution No. [RESO NO.], adopted by the Board of Directors on [May 18, 2023] (the “Sixty-Sixth Supplemental Resolution”). The Master Resolution, as supplemented and amended as described in this Contract of Purchase, is herein called the “Resolution.” The Bonds are authorized to be issued pursuant to applicable California law, including the Municipal Utility District Act (Sections 12850 to 12860 of the Public Utilities Code), the Revenue Bond Law of 1941 (Government Code Section 54300 *et seq.*), Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (section 53580 *et seq.*) and the Resolution. The Bonds will be special obligations of the District payable exclusively from, and are secured by a pledge (effected in the manner and to the extent provided in the Resolution) of, the Net Revenues (as defined in the Resolution). The Bonds shall be payable and shall be subject to redemption as provided in the Resolution.

(c) The Bonds are being issued to (i) refund the Refunded Bonds (as defined in the Official Statement), and (ii) pay certain costs associated with the issuance of the Bonds. [In connection with the refunding of the Refunded Bonds, the District expects to terminate an interest rate swap agreement that was executed in [] to hedge potential interest rate exposure relating to the future refunding of the Refunded Bonds. The District expects that it will receive a termination payment for the termination of the interest rate swap agreement.] A portion of the proceeds of the Bonds, together with other available funds, will be deposited in an escrow fund established pursuant to an escrow agreement (the “Escrow Agreement”) between the District and the Trustee, in its capacity as Escrow Agent (in such capacity, the “Escrow Agent”).

(d) The District has heretofore delivered to the Underwriters copies of the Preliminary Official Statement dated [POS DATE] relating to the Bonds (the “Preliminary Official Statement”) in connection with the public offering of the Bonds. The Preliminary Official Statement was deemed final by the District as of the date thereof in accordance with paragraph (b)(1) of Rule 15c2-12 of the Securities and Exchange Commission (“Rule 15c2-12”), except for the information not required to be included therein under Rule 15c2-12.

(e) The District shall prepare and deliver to the Underwriters, as promptly as practicable, but in any event not later than two business days prior to the Closing Date (as defined below) or seven business days from the date hereof, a final official statement, with such changes and amendments as may be agreed to by the Underwriters, in such quantities as the Underwriters may reasonably request in order to comply with paragraph (b)(4) of Rule 15c2-12 and the rules of the Municipal Securities Rulemaking Board (“MSRB”) (such official statement, including the cover page and Appendices thereto, as the same may be supplemented or amended pursuant to paragraph (i) of Section 2 hereof, is herein referred to as the “Official Statement”). In addition, the District will provide, subject to customary disclaimers regarding the transmission of electronic copies, an electronic copy of the final Official Statement to the Underwriters in the currently required designated electronic format stated in MSRB Rule G-32 and the EMMA Dataport Manual (as defined below). The parties agree that the format in which the Preliminary Official Statement was delivered meets such electronic format requirements.

(f) Within one (1) business day after receipt of the Official Statement from the District, but by no later than the Closing Date, the Underwriters shall, at their own expense submit the Official Statement to EMMA (as defined below). The Underwriters will comply with the provisions of MSRB Rule G-32, including without limitation the submission of Form G-32 and the Official Statement and notify the District of the date on which the Official Statement has been filed with EMMA.

“EMMA” means the MSRB’s Electronic Municipal Market Access system, or any other electronic municipal securities information access system designated by the MSRB for collecting and disseminating primary offering documents and information.

“EMMA Dataport Manual” means the document(s) designated as such published by the MSRB from time to time setting forth the processes and procedures with respect to submissions to be made to the primary market disclosure service of EMMA by underwriters under Rule G-32(b).

(g) The District hereby ratifies, confirms and approves the use and distribution by the Underwriters prior to the date hereof of the Preliminary Official Statement and hereby authorizes the Underwriters to use and distribute the Official Statement, the Resolution, and this Contract of Purchase, and all information contained in each, and all other documents, certificates and statements furnished by the District to the Underwriters in connection with the transactions contemplated by this Contract of Purchase, in connection with the offer and sale of the Bonds.

The District will covenant pursuant to a Continuing Disclosure Agreement dated as of the date of the issuance of the Bonds (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association (the “Trustee”), to provide annual reports and certain notices as described in Appendix F of the Official Statement.

(h) The District agrees and acknowledges that: (i) the Underwriters are not acting as municipal advisors within the meaning of Section 15B of the Securities Exchange Act, as amended, (ii) the primary role of the Underwriters, as underwriters, is to purchase securities, for resale to investors, in an arm’s length commercial transaction between the District and the Underwriters and the Underwriters have financial and other interests that differ from those of the District; (iii) the Underwriters are acting solely as principals and are not acting as municipal advisors, financial advisors or fiduciaries to the District and have not assumed any advisory or fiduciary responsibility to the District with respect to the transaction contemplated hereby and the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriters have provided other services or are currently providing other services to the District on other matters); (iv) the only contractual obligations the Underwriters have to the District with respect to the transaction contemplated hereby expressly are set forth in this Contract of Purchase; and (v) the District has consulted its own financial and/or municipal, legal, accounting, tax and other advisors, as applicable, to the extent it has deemed appropriate.

(i) At 8:00 A.M., Sacramento time, on [CLOSING DATE] or at such earlier or later time or date as shall be agreed upon by the Underwriters and the District (such time and date being herein referred to as the “Closing Date”), the District will deliver the Bonds to The Depository Trust Company, New York, New York (“DTC”), for the account of the Underwriters, duly executed by the District, and the other documents herein mentioned; and the Underwriters

will (i) accept such delivery and pay the purchase price of the Bonds as set forth in paragraph (a) of this Section by wire transfer in San Francisco, California to the order of the District. Delivery of the documents herein mentioned shall be made at the offices of Orrick, Herrington & Sutcliffe LLP, 400 Capitol Mall, Suite 3000, Sacramento, California 95814, or such other place as shall have been mutually agreed upon by the District and the Underwriters, except that the Bonds shall be delivered at the offices of DTC in New York, New York or at such other place and in such manner as shall have been mutually agreed upon by the District and the Underwriters.

The Bonds shall be issued initially in fully registered book-entry eligible form (which may be typewritten) in the form of a single registered bond for each maturity of the Bonds, shall bear CUSIP numbers and shall be registered in the name of Cede & Co., as nominee of DTC.

2. Representations, Warranties and Agreements of the District. The District hereby represents, warrants to and agrees with the Underwriters that:

(a) The District is a political subdivision of the State of California duly organized and validly existing pursuant to the Municipal Utility District Act as contained in Public Utilities Code Section 11501 *et seq.* (the “Act”) and has, and at the Closing Date will have, full legal right, power and authority (i) to enter into this Contract of Purchase, the Escrow Agreement, and the Undertaking, (ii) to adopt the Resolution, (iii) to pledge the Net Revenues as set forth in the Resolution, (iv) to issue, sell and deliver the Bonds to the Underwriters pursuant to the Resolution as provided herein, (v) to acquire, construct, operate, maintain, improve and finance and refinance its Electric System (as defined in the Resolution) and conduct the business thereof as set forth in and contemplated by the Preliminary Official Statement and the Official Statement, and (vi) to carry out, give effect to and consummate the transactions contemplated by this Contract of Purchase, the Escrow Agreement, the Undertaking, the Resolution, and the Preliminary Official Statement and the Official Statement;

(b) The District has complied, and will at the Closing Date be in compliance, in all material respects, with the Act, the Resolution, and with the obligations in connection with the issuance of the Bonds on its part contained in the Resolution, the Escrow Agreement, the Bonds, the Act, the Undertaking and this Contract of Purchase;

(c) The District has duly and validly adopted the Resolution, has duly authorized and approved the execution and delivery of the Bonds, this Contract of Purchase, the Escrow Agreement, the Undertaking and the Official Statement and has duly authorized and approved the performance by the District of its obligations contained in, and the taking of any and all action as may be necessary to carry out, give effect to and consummate the transactions contemplated by, each of said documents and, at the Closing Date, the Bonds will have been validly issued and delivered, the Resolution, the Escrow Agreement, the Undertaking and this Contract of Purchase will constitute the valid, legal and binding obligations of the District enforceable in accordance with their respective terms (subject to the effect of, and restrictions and limitations imposed by or resulting from, (i) bankruptcy, insolvency, debt adjustment, moratorium, reorganization or other similar laws affecting creditors’ rights, and (ii) judicial discretion) and the Resolution will be in full force and effect;

(d) The District is not in breach of or in default under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States of America, or of any department, division, agency or instrumentality of either or any applicable court or administrative decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District is otherwise subject or bound which in any material way, directly or indirectly, affects the issuance of the Bonds or the validity thereof, the validity or adoption of the Resolution or the execution and delivery of the Bonds, this Contract of Purchase, the Escrow Agreement, the Undertaking or the other instruments contemplated by any of such documents to which the District is a party, and the adoption of the Resolution and compliance with the provisions of each will not, as of the date hereof and as of the Closing Date, conflict with or constitute a breach of or default in any material way under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States, or of any department, division, agency or instrumentality of either or any applicable court or administrative judgment, decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District or any of the property or assets of the Electric System (as defined in the Resolution) are otherwise subject or bound, and no event which would have a material and adverse effect upon the financial condition of the District has occurred and is continuing which constitutes or with the passage of time or the giving of notice, or both, would constitute a default or event of default by the District under any of the foregoing;

(e) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Resolution, the Escrow Agreement, the Undertaking and this Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, this Contract of Purchase, the Escrow Agreement, the Undertaking, the Bonds or the Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained;

(f) The Bonds, when issued and delivered in accordance with the Resolution and this Contract of Purchase and paid for by the Underwriters on the Closing Date as provided herein, will be validly issued and outstanding special obligations of the District enforceable against the District in accordance with their terms and entitled to all the benefits and security of the Resolution; and, upon the issuance and delivery of the Bonds, the Resolution will provide, for the benefit of the holders from time to time of the Bonds, a legally valid and binding pledge of and lien on Net Revenues pledged under the Resolution, as provided in and contemplated by the Resolution;

(g) The Preliminary Official Statement, as of its date and as of the date hereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(h) At the time of the District's acceptance hereof and (unless the Official Statement is amended or supplemented pursuant to paragraph (i) of Section 2 hereof) at all times subsequent to the date of delivery thereof up to and including the Closing Date, the Official Statement will be true, correct, complete and final in all material respects and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(i) If, after the date of this Contract of Purchase and until 25 days after the end of the "underwriting period" (as defined in Rule 15c2-12), any event shall occur that might cause the Official Statement to contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the District hereby covenants and agrees, to the extent it has knowledge of such event, to notify the Underwriters (and for the purposes of this clause to provide the Underwriters with such information as they may from time to time reasonably request), and, if in the opinion of the Underwriters and their counsel such event requires the preparation and publication of a supplement or amendment to the Official Statement, at its expense to supplement or amend the Official Statement in a form and manner approved by the Underwriters and furnish to the Underwriters a reasonable number of copies of such supplement or amendment. For purposes of this Contract of Purchase, the District may assume that the end of the "underwriting period" has occurred on the Closing Date unless the District is otherwise notified by the Underwriters on or prior to the Closing Date. If the Underwriters notify the District that the Closing Date is not the end of the "underwriting period", then the Underwriters shall further notify the District of the date that is the end of the "underwriting period" (as defined in Rule 15c2-12);

(j) If the Official Statement is supplemented or amended pursuant to paragraph (i) of Section 2 of this Contract of Purchase, at the time of each supplement or amendment thereto and (unless subsequently again supplemented or amended pursuant to such paragraph) at all times subsequent thereto during the "underwriting period", the Official Statement as so supplemented or amended will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which made, not misleading;

(k) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened (i) in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, (ii) affecting or seeking to prohibit, restrain or enjoin the issuance, sale or delivery of any of the Bonds, the application of the proceeds thereof in accordance with the Resolution, or the collection or application of Revenues (as defined in the Resolution) or the collection or application of the Net Revenues pledged to pay the principal of and interest on the Bonds under the Resolution or in any way contesting or affecting the validity or enforceability

of any of the Bonds, the Escrow Agreement, the Resolution, the Undertaking, this Contract of Purchase or any action of the District contemplated by any of said documents, (iii) which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, (iv) contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or the powers of the District or its authority with respect to the Bonds, the adoption of the Resolution, or the execution and delivery of the Undertaking, the Escrow Agreement, or this Contract of Purchase, or any action of the District contemplated by any of said documents, and (v) which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor;

(l) The District will furnish such information, execute such instruments and take such other action in cooperation with the Underwriters as the Underwriters may reasonably request (i) to qualify the Bonds for offer and sale under the “Blue Sky” or other securities laws and regulations of such states and other jurisdictions of the United States as the Senior Underwriter may designate, and (ii) to determine the eligibility of the Bonds for investment under the laws of such states and other jurisdictions and will use its best efforts to continue such qualifications in effect so long as required for the distribution of the Bonds; provided that in connection therewith the District shall not be required to execute or file a general or special consent to service of process or qualify to do business in any jurisdiction and will advise the Senior Underwriter promptly of receipt by the District of any written notification with respect to the suspension of the qualification of the Bonds for sale in any jurisdiction or written notification of the initiation or threat of any proceeding for that purpose;

(m) The audited financial statements of the District for the years ending December 31, 2022 and December 31, 2021 heretofore delivered to the Underwriters and incorporated by reference in the Preliminary Official Statement and the Official Statement as Appendix B fairly present the financial position of the District as of the dates indicated and such financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis;

(n) Between the date hereof and the Closing Date, the District will not, without the prior written consent of the Senior Underwriter, offer or issue any bonds, notes or other obligations for borrowed money, or incur any material liabilities, direct or contingent, nor will there be any adverse change of a material nature in the financial position, results of operations or condition, financial or otherwise, of the District, in either case other than in the ordinary course of its business or as disclosed in the Preliminary Official Statement or the Official Statement or as otherwise disclosed to the Senior Underwriter;

(o) The Bonds, the Escrow Agreement, the Resolution and the Undertaking conform to the descriptions thereof contained in the Preliminary Official Statement and the Official Statement;

(p) The District has the legal authority to apply and will apply, or cause to be applied, the proceeds from the sale of the Bonds as provided in and subject to all of the terms and provisions of the Resolution and as described in the Preliminary Official Statement and the Official

Statement, including for payment of District expenses incurred in connection with the negotiation, marketing, issuance and delivery of the Bonds to the extent required by Section 7 (Expenses), and will not take or omit to take any action which action or omission will adversely affect the exclusion from gross income for federal income tax purposes of the interest on the Bonds;

(q) Any certificate signed by any official of the District, and delivered to the Underwriters, shall be deemed a representation and warranty by the District to the Underwriters as to the statements made therein; and

(r) Except as disclosed in the Preliminary Official Statement and the Official Statement, during the last five years the District has complied in all material respects with all previous undertakings required by Rule 15c2-12.

3. Conditions to the Obligations of the Underwriters. The obligations of the Underwriters to accept delivery of and pay for the Bonds on the Closing Date shall be subject to the performance by the District of its obligations to be performed hereunder at or prior to the Closing Date and to the fulfillment of the following conditions:

(a) The representations, warranties and covenants of the District contained herein shall be true, complete and correct on the date hereof and as of the Closing Date as if made on the Closing Date;

(b) At the Closing Date, the Resolution shall have been duly adopted and shall be in full force and effect, and shall not have been repealed, amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters, and there shall have been taken in connection therewith, with the issuance of the Bonds and with the transactions contemplated thereby and by this Contract of Purchase, all such actions as, in the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel (“Bond Counsel”), shall be necessary and appropriate;

(c) At the Closing Date, the Official Statement shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters;

(d) At or prior to the Closing Date, the Underwriters shall have received copies of the following documents, in each case satisfactory in form and substance to the Underwriters:

(1) The Official Statement executed on behalf of the District by its Chief Executive Officer and General Manager, any Member of its Executive Committee, its Treasurer, its Secretary or its Chief Financial Officer (each an “Authorized Representative”);

(2) The Undertaking executed on behalf of the District by an Authorized Representative;

(3) The Sixty-Sixth Supplemental Resolution, with only such supplements or amendments thereto as may have been agreed to by the Underwriters and certified by an authorized officer of the District under its seal as having been duly adopted by the District and as being in full force and effect, and the Resolution, certified by an authorized officer

of the District as being in full force and effect, with such supplements and amendments thereto adopted after the date hereof as may have been agreed to by the Underwriters;

(4) An opinion or opinions relating to the Bonds, dated the Closing Date and addressed to the District, of Bond Counsel, in substantially the form included in the Official Statement as Appendix E, together with a letter or letters of such Bond Counsel, dated the Closing Date and addressed to the Underwriters, to the effect that the foregoing opinion or opinions addressed to the District may be relied upon by the Underwriters to the same extent as if such opinion or opinions were addressed to them;

(5) An opinion or opinions, dated the Closing Date and addressed to the Senior Underwriter, of Bond Counsel, in substantially the form attached hereto as Exhibit E;

(6) An opinion, dated the Closing Date and addressed to the Senior Underwriter, of General Counsel to the District, in substantially the form attached hereto as Exhibit C;

(7) An opinion, dated the Closing Date and addressed to the Underwriters, of Nixon Peabody LLP, as counsel for the Underwriters (“Underwriters’ Counsel”), to the effect that (i) the Bonds are exempt from the registration requirements of the Securities Act of 1933, as amended, and the Resolution is exempt from qualification under the Trust Indenture Act of 1939, as amended; (ii) the Undertaking complies as to form in all material respects with the requirements of paragraph (b)(5) of the Rule applicable to the primary offering of the Bonds; and (iii) based upon the information made available to them in the course of their participation in the preparation of the Preliminary Official Statement and the Official Statement as counsel to the Underwriters and without having undertaken to determine independently, or assuming any responsibility for, the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement, they do not believe that (A) the Preliminary Official Statement, as of its date and as of the date of the Contract of Purchase, and (B) the Official Statement as of its date and as of the Closing Date, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except for the information relating to Cede & Co., DTC or the operation of the book-entry system, the Appendices to the Official Statement, except Appendices D, and F, and summaries thereof and references thereto, and other financial, accounting and statistical data included therein, as to all of which no view need be expressed); and (iii) with respect to such matters as the Underwriters may reasonably require;

(8) A certificate, dated the Closing Date, signed by an Authorized Representative of the District in substantially the form attached hereto as Exhibit D (but in lieu of or in conjunction with such certificate the Underwriters may, in its sole discretion, accept certificates or opinions of General Counsel to the District, or of other counsel acceptable to the Underwriters, that in the opinion of such counsel the issues raised in any pending or threatened litigation referred to in such certificate are without substance or that the contentions of all plaintiffs therein are without merit);

(9) The Escrow Agreement, executed by the District and the Escrow Agent;

(10) An acceptance of and agreement to the provisions of the Sixty-Sixth Supplemental Resolution executed by the Trustee under the Resolution in form and substance acceptable to the Underwriters;

(11) A tax certificate related to the Bonds in substance and form satisfactory to Bond Counsel;

(12) Ratings of the Bonds from S&P Global Ratings (“S&P”) of not less than “[AA (stable outlook)]” and from Fitch Ratings, Inc. (“Fitch”) of not less than “[AA (stable outlook)]”;

(13) A report of [_____], as verification agent (the “Verification Agent”) with respect to the sufficiency of amounts deposited pursuant to the Escrow Agreement and an opinion of Bond Counsel respecting the defeasance of the Refunded Bonds;

(14) An opinion of counsel to the Trustee/Escrow Agent, dated the Closing Date, addressed to the Underwriters, to the effect that (i) the Trustee/Escrow Agent is a national banking association duly organized and validly existing under the laws of the United States of America having full power and being qualified to enter into, accept and agree to the provisions of the Resolution and to enter into and perform the Undertaking and the Escrow Agreement, (ii) the Undertaking and the Escrow Agreement have been duly authorized, executed and delivered by the Trustee/Escrow Agent and, assuming due authorization, execution and delivery by the other parties thereto, constitutes the valid and binding obligation of the Trustee/Escrow Agent enforceable in accordance with its terms, subject to laws relating to bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting creditors’ rights generally, to the application of equitable principals and to the exercise of judicial discretion in appropriate cases, and to enter into and perform the Undertaking and the Escrow Agreement, (iii) all approvals, consents and orders of any governmental authority or agency having jurisdiction in this matter that would constitute a condition precedent to the performance by the Trustee/Escrow Agent of its duties and obligations under the Resolution, the Escrow Agreement, and the Undertaking have been obtained and are in full force and effect, and (iv) the acceptance of the duties and obligations of the Trustee/Escrow Agent under the Resolution, the Escrow Agreement, and the Undertaking and the consummation of the transactions on the part of the Trustee/Escrow Agent contemplated therein, and the compliance by the Trustee/Escrow Agent, as applicable, with the terms, conditions and provisions of such document do not contravene any provisions of applicable law or regulation or any order or decree, writ or injunction or the Articles of Association or Bylaws of the Trustee/Escrow Agent, and, to the best knowledge of such counsel, will not require the consent under or result in a breach of or a default under, any resolution, agreement or other instrument to which the Trustee/Escrow Agent is a party or by which it may be bound;

(15) A copy of the Blanket Letter of Representations to DTC relating to the Bonds signed by DTC and the District; and

(16) Such additional legal opinions, certificates, instruments and other documents as the Underwriters may reasonably request to evidence the truth and accuracy and completeness, as of the date hereof and as of the Closing Date, of the District's representations and warranties contained herein and of the statements and information contained in the Preliminary Official Statement or the Official Statement, and the due performance or satisfaction by the District at or prior to the Closing Date of all agreements then to be performed and all conditions then to be satisfied by the District in connection with the transactions contemplated hereby and by the Resolution and the Preliminary Official Statement or the Official Statement.

If any of the conditions to the obligations of the Underwriters contained in this Section or elsewhere in this Contract of Purchase with respect to the Bonds shall not have been satisfied when and as required herein, all obligations of the Underwriters hereunder with respect to the Bonds may be terminated by the Underwriters at, or at any time prior to, the Closing Date by written notice to the District.

4. Offering. The obligations of the District to sell and to deliver the Bonds on the Closing Date to the Underwriters shall be subject to the following conditions:

(a) The entire \$[PAR] aggregate principal amount of the Bonds shall be purchased, accepted and paid for by the Underwriters on the Closing Date; and

(b) The District shall receive an Issue Price Certificate of the Senior Underwriter substantially in the form attached hereto as Exhibit F with respect to the Bonds.

5. Issue Price of the Bonds.

(a) The Senior Underwriter, on behalf of the Underwriters, agrees to assist the District in establishing the issue price of the Bonds and shall execute and deliver to the District at Closing an "issue price" or similar certificate substantially in the form attached hereto as Exhibit F, together with the supporting pricing wires or equivalent communications, with modifications to such certificate as may be deemed appropriate or necessary, in the reasonable judgment of the Senior Underwriter, the District and Bond Counsel, to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds.

(b) [Except for the maturities set forth in Schedule A attached hereto,] the District will treat the first price at which 10% of each maturity of the Bonds (the "10% test") is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test).

(c) [The Senior Underwriter confirms that the Underwriters have offered the Bonds to the public on or before the date of this Contract of Purchase at the offering price or prices (the "initial offering price"), or at the corresponding yield or yields, set forth in the final Official Statement. Schedule A sets forth, as of the date of this Contract of Purchase, the maturities, if any, of the Bonds for which the 10% test has not been satisfied and for which the District and the Senior Underwriter, on behalf of the Underwriters, agree that (i) the Senior Underwriter will retain all unsold Bonds of each maturity for which the 10% test has not been satisfied and not allocate any

such Bonds to any other Underwriter and (ii) the restrictions set forth in the next sentence shall apply, which will allow the District to treat the initial offering price to the public of each such maturity as of the sale date as the issue price of that maturity (the “hold-the-offering-price rule”). So long as the hold-the-offering-price rule remains applicable to any maturity of the Bonds, the Senior Underwriter will neither offer nor sell unsold Bonds of that maturity to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following:

(1) the close of the fifth (5th) business day after the sale date; or

(2) the date on which the Underwriters have sold at least 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public.

The Senior Underwriter shall promptly advise the District or the District’s municipal advisor when the Underwriters have sold 10% of that maturity of the Bonds to the public at [a price] that is no higher than the initial offering price to the public, if that occurs prior to the close of the fifth (5th) business day after the sale date.

The District acknowledges that, in making the representation set forth in this subsection, the Senior Underwriter will rely on (i) the agreement of each Underwriter to comply with the hold-the-offering-price rule, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an Underwriter is a party to a retail distribution agreement that was employed in connection with the initial sale of the Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, as set forth in the retail distribution agreement and the related pricing wires. The District further acknowledges that each Underwriter shall be solely liable for its failure to comply with its agreement regarding the hold the offering price rule and that no Underwriter shall be liable for the failure of any other Underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a retail distribution agreement to comply with its agreement regarding the hold-the-offering-price rule as applicable to the Bonds.]

(d) [The Senior Underwriter confirms that:

(1) any agreement among underwriters, any selling group agreement and each retail distribution agreement (to which the Senior Underwriter is a party) relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter, each dealer who is a member of the selling group, and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (A)(ii) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (ii) comply with the hold-the-offering-price rule, if applicable, in each case if and for

so long as directed by the Senior Underwriter and as set forth in the related pricing wires, (B) promptly notify the Representative of any sales of the Bonds that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the Bonds to the public (each such term being used as defined below) and (C) acknowledge that, unless otherwise advised by the Underwriter, dealer or broker-dealer, the Representative shall assume that each order submitted by the Underwriter, dealer or broker-dealer is a sale to the public; and

(2) any agreement among underwriters relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the Bonds to the public to require each broker-dealer that is a party to such retail distribution agreement to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter or the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Senior Underwriter or the Underwriter and as set forth in the related pricing wires.]

(e) The Underwriters acknowledge that sales of any Bonds to any person that is a related party to an Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

(1) “public” means any person other than an underwriter or a related party,

(2) “underwriter” means (A) any person that agrees pursuant to a written contract with the District (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public),

(3) a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (i) more than 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

(4) “sale date” means the date of execution of this Contract of Purchase by all parties.

6. **Termination.** The Underwriters shall have the right to terminate their obligations under this Contract of Purchase to purchase, accept delivery of and to pay for the Bonds, if,

(a) between the date hereof and the Closing Date, the market price or marketability, or the ability of the Underwriters to enforce contracts for the sale, at the initial offering prices set forth in the Official Statement, of the Bonds have been materially adversely affected, in the judgment of the Underwriters, (evidenced by a written notice to the District terminating the obligation of the Underwriters to accept delivery of and pay for the Bonds), by reason of any of the following:

(1) (x) any legislation which is (A) enacted by Congress, (B) favorably reported for passage to either House of the Congress of the United States by any Committee of such House to which such legislation has been referred for consideration, or (C) recommended to the Congress for passage by the President of the United States or the Treasury Department, but only, however, if the occurrence of any of the foregoing events is generally accepted by the municipal bond market as potentially affecting the federal tax status of the District, its property or income or the interest on its bonds or notes (including the Bonds), (y) any decision rendered by a court established under Article III of the Constitution of the United States or the Tax Court of the United States, or (z) a final order, ruling, regulation or official statement issued or made by or on behalf of the Treasury Department of the United States or the Internal Revenue Service with the purpose or effect, directly or indirectly, of imposing federal income taxation upon such interest as would be received by the holders of the Bonds, or upon such revenues or other income of the general character expected to be received by the District; provided, however, that the enactment of legislation which only diminishes the value of, as opposed to eliminating the exclusion from gross income for federal income tax purposes will not give the Underwriters the right to terminate their obligations hereunder;

(2) Legislation enacted (or resolution passed) by the Congress or a final order, ruling, regulation or official statement is issued or made by or on behalf of the Securities and Exchange Commission, or any other governmental agency having jurisdiction of the subject matter, to the effect that obligations of the general character of the Bonds are not exempt from registration under or other requirements of the Securities Act of 1933, as amended, or are not exempt from qualification under, or other requirements of, the Trust Indenture Act of 1939, as amended, or that the issuance, offering or sale of the Bonds or obligations of the general character of the Bonds, including any or all underlying arrangements, as contemplated hereby or by the Preliminary Official Statement or the Official Statement, otherwise is or would be in violation of the federal securities laws as amended and then in effect;

(3) Any new material outbreak or escalation of hostilities having a material effect on the financial markets of the United States or the declaration by the United States of a national emergency or war or the occurrence of any other local, national or international calamity, crisis or event relating to the effective operation of the government of or the financial community in the United States or an escalation thereof, including, without limitation, a downgrade of the sovereign debt rating of the United States by any major credit rating agency or payment default on United States Treasury obligations;

(4) the declaration of a general banking moratorium by federal, New York or California authorities, or the general suspension of trading on the New York Stock Exchange or any other national securities exchange, or any material disruption in commercial banking or securities settlement or payment services or clearing services;

(5) the imposition by the New York Stock Exchange or other national securities exchange, or any governmental authority, of any material restrictions not now in force with respect to the Bonds or obligations of the general character of the Bonds or securities generally, or the material increase of any such restrictions now in force, including those relating to the net capital requirements of, the Underwriters;

(6) the adoption of any amendment to the federal or California Constitution, decision by any federal or California court, or enactment by any federal or California legislative body materially adversely affecting (i) the District or the right of the District to receive or to pledge any of the Net Revenues, or (ii) the validity or enforceability of this Contract of Purchase, the Bonds or the Resolution;

(7) the adoption of any amendment to the California Constitution, decision by any California court, or enactment by any California legislative body adversely affecting the exemption of state or local income tax upon such interest as would be received by the holders of the Bonds, or

(8) (i) a downgrading or suspension of any rating (without regard to credit enhancement) by Moody's, S&P, or Fitch of any debt securities issued by the District, or (ii) there shall have been any official statement as to a possible downgrading (such as being placed on "credit watch" or "negative outlook" or any similar qualification) of any rating by Moody's, S&P or Fitch of any debt securities issued by the District, including the Bonds.

(b) an event occurs, or information becomes known, which, in the judgment of the Underwriters, makes untrue in any material respect any statement or information contained in the Official Statement, or has the effect that the Official Statement contains any untrue statement of material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

7. **Expenses.** (a) Except as set forth in paragraph (b) of this Section, the Underwriters shall be under no obligation to pay, and the District shall pay, or cause to be paid, all expenses incident to the performance of the District's obligations hereunder including, but not limited to, the cost of word processing and reproducing, executing and delivering the Bonds to the Underwriters; the cost of preparation, printing (and/or word processing and reproducing), distribution and delivery of the Resolution; the cost of printing and distributing copies of the Preliminary Official Statement and the Official Statement in sufficient quantities for distribution in connection with the sale of the Bonds (including resales in the secondary market); the fees and disbursements of Bond Counsel; the fees and disbursements of Public Financial Management, Inc. for its services as Municipal Advisor to the District; the fees and disbursements of any other engineers, accountants, and any other experts or consultants retained in connection with the issuance of the Bonds; the fees and disbursements of the Trustee/Escrow Agent and Verification Agent; fees charged by the rating agencies for rating the Bonds; any advertising expenses; filing fees; CUSIP charges; or fees and expenses of any credit enhancement; expenses incurred by the Underwriters on behalf of the District relating to food, transportation or lodging for District staff members attending the bond pricing are to be reimbursed by the District through proceeds of the Bonds or available funds of the District (the District's obligations in regard to these expenses survive if delivery of the Bonds fails due to one of the conditions set forth in Section 3 hereof or this Contract of Purchase is terminated pursuant to Section 6 hereof) and any other expenses not specifically enumerated in paragraph (b) of this Section incurred in connection with the issuance of the Bonds.

(b) The District shall be under no obligation to pay, and the Underwriters shall pay (from the expense component of the underwriting discount), the cost of preparation of the Agreement Among Underwriters and the letter of instructions relating thereto and this Contract of Purchase; the cost of wiring funds for the payment of the purchase prices of the Bonds; the fees and expenses of DTC incurred with respect to depositing the Bonds therewith; expenses to qualify the Bonds for sale under any "Blue Sky" laws; fees to the California Debt and Investment Advisory Commission; and all other expenses incurred by the Underwriters in connection with its public offering and distribution of the Bonds not specifically enumerated in paragraph (a) of this Section, including the fees and disbursements of Underwriters' Counsel. Notwithstanding that the fees to the California Debt and Investment Advisory Commission are solely the legal obligation of the Underwriters, the District agrees to reimburse the Underwriters for such fees.

8. **Notices.** Any notice or other communication to be given to the District under this Contract of Purchase may be given by delivering the same in writing to Sacramento Municipal Utility District, at 6201 S Street, Sacramento, California 95817-1899; and any notice or other communication to be given to the Underwriters under this Contract of Purchase may be given by delivering the same in writing to Barclays Capital Inc., 10250 Constellation Blvd, Suite 750, Los Angeles, CA 90067, Attention: Christopher D. Roberts, Director.

9. **Parties in Interest.** This Contract of Purchase is made solely for the benefit of the District and the Underwriters (including successors or assigns of any Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof. The term "successors and assigns" as used in this Section shall not include any purchaser of the Bonds, as such purchaser, from any of the several Underwriters.

10. Survival of Representations and Warranties. The representations and warranties of the District, set forth in or made pursuant to this Contract of Purchase, shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the closing or termination of this Contract of Purchase and regardless of any investigations or statements as to the results thereof made by or on behalf of the Underwriters and regardless of delivery of and payment for the Bonds.

11. Counterparts. This Contract of Purchase may be executed in several counterparts, which together shall constitute one and the same instrument.

12. California Law Governs; Venue. The validity, interpretation and performance of this Contract of Purchase shall be governed by the laws of the State of California. Any action or proceeding to enforce or interpret this Contract of Purchase shall be brought, commenced or prosecuted in the County of Sacramento, California.

[remainder of page intentionally left blank]

13. **Entire Agreement.** This Contract of Purchase when accepted by you in writing as heretofore specified shall constitute the entire agreement between us.

14. **Effectiveness.** This Contract of Purchase shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by an authorized officer of the District and shall be valid and enforceable as of the time of such acceptance.

Very truly yours,

BARCLAYS CAPITAL INC.
[UNDERWRITING GROUP TO COME]

BY: BARCLAYS CAPITAL INC., as Senior
Underwriter

Christopher D. Roberts
Director

Accepted: [SALE DATE]

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Russell Mills
Treasurer

[Signature page to Contract of Purchase]

Exhibit A

SACRAMENTO MUNICIPAL UTILITY DISTRICT
\$(PAR) Electric Revenue Refunding Bonds, 2023 Series K

<u>Maturity</u> <u>(August 15)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield</u>	<u>Price</u>
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SACRAMENTO MUNICIPAL UTILITY DISTRICT

**Exhibit B to the Contract of Purchase
(Official Statement)**

SACRAMENTO MUNICIPAL UTILITY DISTRICT

**Exhibit C to the Contract of Purchase
(Opinion of General Counsel to the
Sacramento Municipal Utility District)**

[CLOSING DATE]

Barclays Capital Inc.
10250 Constellation Blvd, Suite 750
Los Angeles, CA 90067

Re: Sacramento Municipal Utility District
[\$[PAR] Electric Revenue Refunding Bonds, 2023 Series K

Ladies and Gentlemen:

This opinion is being delivered pursuant to Paragraph 3(d)(6) of the Contract of Purchase (the “Contract of Purchase”), dated [SALE DATE], between Barclays Capital Inc., as Senior Managing Underwriter named therein (the “Senior Underwriter”), and the Sacramento Municipal Utility District (the “District”) relating to the above-captioned bonds (the “Bonds”).

As counsel to the District, I have reviewed (i) Resolution No. 6649 of the District, adopted on January 7, 1971, as amended and supplemented to date, including as amended and supplemented by Resolution No. [RESO NO.], adopted on [May 18, 2023] (as so amended and supplemented, the “Resolution”); (ii) the Continuing Disclosure Agreement, dated the date hereof (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association, as trustee (in such capacity, the “Trustee”); (iii) the Preliminary Official Statement of the District, dated [POS DATE] (the “Preliminary Official Statement”); (iv) the Official Statement of the District, dated [SALE DATE] (the “Official Statement”) (v) the escrow agreement, dated the date hereof (the “Escrow Agreement”), between the District and U.S. Bank Trust Company, National Association, as escrow agent (in such capacity, the “Escrow Agent”), and (vi) such other documents, opinions and matters to the extent I deemed necessary to provide the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. I have assumed the genuineness of all documents and signatures presented to me (whether as originals or as copies) and the due and legal execution and delivery by, and validity against, any parties other than the District. I have not undertaken to verify independently, and have assumed, the accuracy of the factual matters represented, warranted or certified in the documents referred to in the second paragraph hereof. I have further assumed compliance with all covenants and agreements contained in such documents.

I call attention to the fact that the rights and obligations under the Resolution, the Escrow Agreement, the Undertaking, and the Contract of Purchase may be subject to bankruptcy,

insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, and to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. I express no opinion with respect to any indemnification, contribution, choice of law, choice of forum or waiver provisions contained therein.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, I am of the opinion that:

1. The District is a political subdivision of the State of California duly organized and validly existing under the Act, as amended, and has full legal right, power and authority to execute and deliver (or adopt, as the case may be), and to perform its obligations under, the Resolution, the Escrow Agreement, the Undertaking and the Contract of Purchase.

2. The Contract of Purchase, the Escrow Agreement, and the Undertaking have been duly authorized, executed and delivered by the District, and, assuming due authorization, execution and delivery by each of the parties thereto other than the District, constitute the legal, valid and binding obligations of the District, enforceable against the District in accordance with their respective terms.

3. The District is not in breach of or default under any existing constitutional provision, applicable law or administrative regulation of the State of California or the United States or any applicable judgment or decree or any loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject which would have a material adverse effect on the financial condition or operations of the District, and no event has occurred and is continuing which with the passage of time or the giving of notice, or both, would constitute a default or event of default under any such instrument which would have a material adverse effect on the financial condition or operations of the District; and the execution and delivery of the Bonds, the Escrow Agreement, the Undertaking and the Contract of Purchase and the adoption of the Resolution, and compliance with any existing constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject will not, as of the date hereof, conflict with or constitute a breach of or default under any such instrument which would have a material adverse effect on the financial condition or operations of the District, nor will any such execution, delivery, adoption or compliance result in the creation or imposition of any lien, charge or other security interest or encumbrance of any nature whatsoever upon any of the property or assets of the District or under the terms of any such law, regulation or instrument, except as expressly provided by the Bonds and the Resolution.

4. The statements contained in the Preliminary Official Statement and the Official Statement which purport to describe certain provisions of the Bonds, the Escrow Agreement, the Undertaking, and the Resolution present a fair and accurate summary of such provisions for the purpose of use in the Preliminary Official Statement and the Official Statement.

5. Except as described or referred to in the Preliminary Official Statement and the Official Statement, as of the date hereof, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body, pending or, to the best of my knowledge, threatened against the District affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of the Revenues (as defined in the Resolution) or the Net Revenues (as defined in the Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds or contesting or affecting as to the District the validity or enforceability of the Act, the Bonds, the Resolution, the Escrow Agreement, the Contract of Purchase or the Undertaking, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Resolution, or the execution and delivery by the District of the Contract of Purchase, the Escrow Agreement, or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act or the authorization, execution, delivery or performance by the District of the Bonds, the Resolution, the Escrow Agreement, the Undertaking, or the Contract of Purchase.

6. Based upon my review of the Preliminary Official Statement and the Official Statement as General Counsel to the District and without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement (except as specifically set forth in paragraph 4 hereof), I have no reason to believe that the statements contained in the Preliminary Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Preliminary Official Statement, and other financial and statistical data included therein, as to all of which I express no view) as of its date and as of the date of the Contract of Purchase contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and the Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Official Statement, and other financial and statistical data included therein, as to all of which I express no view) (A) as of the date of the Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading or (B) as of the date hereof contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

For purposes of the opinions expressed herein, I have assumed that an agreement or other document is “material” to the District if it involves amounts in excess of \$10,000,000 and that a matter would result in a “material adverse change” to the District if the financial consequences involved would exceed \$10,000,000.

I understand that you are relying upon the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, with respect to the validity of the Bonds and the exclusion of interest on the Bonds from gross income for federal income tax purposes and the Bonds for purposes of State of California income taxation and, accordingly, render no opinion with respect thereto.

Very truly yours,

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Exhibit D to the Contract of Purchase

CERTIFICATE

The Sacramento Municipal Utility District (the “District”), hereby certifies that:

(1) The representations and warranties of the District (excluding those representations and warranties contained in Section 2(e) and Section 2(k) of the hereinafter defined Contract of Purchase) contained in the Contract of Purchase, dated [SALE DATE], between the District and the Underwriters named therein (the “Contract of Purchase”) with respect to the sale by the District of \$[PAR] aggregate principal amount of its Electric Revenue Refunding Bonds, 2023 Series K (the “Bonds”), are true and correct on and as of the Closing Date as if made on the Closing Date.

(2) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Resolution, the Escrow Agreement, the Undertaking, and the Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, the Contract of Purchase, the Escrow Agreement, the Undertaking, the Bonds or the Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained.

(3) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the best of knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened against the District, in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of any of the Bonds or the collection of the Revenues (as defined in the Resolution) or the Net Revenues (as defined in the Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds, or in any way contesting or affecting as to the District the validity or enforceability of the Act, the Bonds, the Resolution, the

Contract of Purchase, the Escrow Agreement, the Undertaking, or any action of the District contemplated by any of said documents, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution system, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Resolution, or the execution and delivery by the District of the Contract of Purchase, the Escrow Agreement or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act of the authorization, execution, delivery or performance by the District of the Bonds, the Resolution, the Escrow Agreement, the Undertaking, or the Contract of Purchase, or any action of the District contemplated by any of said documents, or which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor.

(4) No event affecting the District has occurred (with respect to the Preliminary Official Statement, from its date to the date of the Contract of Purchase, and with respect to the Official Statement, since the date of the Official Statement) which should have been or should be disclosed in the Preliminary Official Statement or the Official Statement so that the Preliminary Official Statement or the Official Statement did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and which has not been disclosed in a supplement or amendment to the Preliminary Official Statement or the Official Statement.

(5) The District has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the date hereof pursuant to the Contract of Purchase with respect to the issuance of the Bonds.

(6) All capitalized terms employed herein which are not otherwise defined shall have the same meanings as in the Contract of Purchase.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Name:
Title:

Dated: [CLOSING DATE]

**Exhibit E to the Contract of Purchase
(Supplemental Opinion of Bond Counsel)**

[Under Review]

[CLOSING DATE]

Barclays Capital Inc.
10250 Constellation Blvd, Suite 750
Los Angeles, CA 90067

Sacramento Municipal Utility District
Electric Revenue Refunding Bonds, 2023 Series K
(Supplemental Opinion)

Ladies and Gentlemen:

This letter is addressed to you, as Senior Underwriter, pursuant to Section 3(d)(5) of the Contract of Purchase, dated [SALE DATE] (the “Purchase Contract”), between you and the other underwriters named therein and the Sacramento Municipal Utility District (“SMUD”), providing for the purchase of \$[PAR] aggregate principal amount of Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2023 Series K (the “Bonds”). The Bonds are being issued pursuant to Resolution No. 6649 of the Board of Directors of SMUD, adopted January 7, 1971, as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. RESO NO.], adopted on [May 18, 2023]. Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution or, if not defined in the Resolution, in the Purchase Contract.

In connection with our role as Bond Counsel to SMUD, we have reviewed the Purchase Contract; the Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; certain portions of the posted preliminary official statement of SMUD, dated [POS DATE] with respect to the Bonds (the “Preliminary Official Statement”) and of the posted official statement of SMUD, dated [SALE DATE], with respect to the Bonds (the “Official Statement”); opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to render the opinions and conclusions set forth herein.

The opinions and conclusions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions or conclusions may be affected by actions taken or omitted or events occurring after the original delivery of the Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the original delivery of the Bonds on the date hereof. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than

SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. We have further assumed compliance with all covenants and agreements contained in such documents. In addition, we call attention to the fact that the rights and obligations under the Bonds, the Resolution, the Tax Certificate and the Purchase Contract and their enforceability may be subject to bankruptcy, insolvency, reorganization, receivership, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinions with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions and conclusions:

1. The Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Resolution is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended.

2. The Purchase Contract has been duly executed and delivered by, and constitutes a valid and binding obligation of, SMUD.

3. The statements contained in the Preliminary Official Statement and the Official Statement under the captions [“THE 2023 SERIES K BONDS” (excluding information relating to book-entry or The Depository Trust Company), “SECURITY FOR THE BONDS” and “TAX MATTERS” and in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION,”] [**To be updated when POS is available**] excluding any material that may be treated as included under such captions by cross-reference or reference to other documents or sources, insofar as such statements expressly summarize certain provisions of the Resolution or set out the content of our final legal opinion as Bond Counsel to SMUD concerning the validity of the Bonds and certain other matters, dated the date hereof and addressed to SMUD, are accurate in all material respects.

4. We are not passing upon and do not assume any responsibility for the accuracy, completeness or fairness of any of the statements contained in the Preliminary Official Statement or (except as explicitly stated in paragraph 3 above) in the Official Statement and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. In our capacity as Bond Counsel to SMUD in connection with issuance of the Bonds, we participated in conferences with your representatives, your counsel, representatives of SMUD, its counsel, accountants, and others, during which the contents of the Preliminary Official Statement or the Official Statement and related matters were discussed. Based on our

participation in the above-mentioned conferences (which, with respect to the Preliminary Official Statement, did not extend beyond the date of the Purchase Contract, and with respect to the Official Statement, did not extend beyond its date), and in reliance thereon, on oral and written statements and representations of SMUD and others and on the records, documents, certificates, opinions and matters herein mentioned, subject to the limitations on our role as Bond Counsel to SMUD, we advise you as a matter of fact and not opinion that (a) no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Preliminary Official Statement which caused us to believe as of the date of the Purchase Contract, based on the documents, drafts and facts in existence and reviewed as of that date, that the Preliminary Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except any information marked as preliminary or subject to change, any information permitted to be omitted by Securities and Exchange Commission Rule 15c2-12 or otherwise left blank and any other differences with the information in the Official Statement), and (b) no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Official Statement which caused us to believe as of the date of the Official Statement and as of the date hereof that the Official Statement contained or contains any untrue statement of a material fact or omitted or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, we expressly exclude from the scope of this paragraph and express no opinion or conclusion, with respect to both the Preliminary Official Statement and the Official Statement, about any CUSIP numbers, financial, accounting, statistical or economic, engineering or demographic data or forecasts, numbers, charts, tables, graphs, estimates, projections, assumptions or expressions of opinion, any statements about compliance with prior continuing disclosure undertakings, any management discussion and analysis, any information about Cede & Co., The Depository Trust Company or book-entry, ratings, rating agencies, financial advisors, swap advisors, underwriters, underwriting and the information contained in Appendices B and C included or referred to therein or omitted therefrom. No responsibility is undertaken or conclusion expressed with respect to any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement or the Official Statement.

This letter is furnished by us as Bond Counsel to SMUD. No attorney-client relationship has existed or exists between our firm and you in connection with the Bonds or by virtue of this letter. We disclaim any obligation to update this letter. This letter is delivered to you as Senior Underwriter of the Bonds, is solely for your benefit as such Senior Underwriter in connection with the original delivery of the Bonds on the date hereof, and is not to be used, circulated, quoted or otherwise referred to or relied upon for any other purpose or by any other person. This letter is not intended to, and may not, be relied upon by owners of Bonds or by any other party to whom it is not specifically addressed.

Very truly yours,

Exhibit F to the Contract of Purchase

(Form of Issue Price Certificate Of The Senior Underwriter Regarding Offering Prices)

SACRAMENTO MUNICIPAL UTILITY DISTRICT

[\$[PAR] Electric Revenue Refunding Bonds, 2023 Series K

The undersigned, on behalf of Barclays Capital Inc., as representative (the “Representative”) of itself, [UNDERWRITING GROUP TO COME] (together, the “Underwriting Group”), hereby certifies, on its own behalf and on behalf of the other members of the Underwriting Group on the basis of representations and warranties set forth in the agreement among underwriters, as set forth below with respect to the sale and issuance of the above-captioned obligations (the “Bonds”).

1. ***Sale of the [General Rule Maturities][Bonds].*** As of the date of this Certificate, for each Maturity of the [General Rule Maturities][Bonds], the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A.

2. ***[Initial Offering Price of the Hold-the-Offering-Price-Maturities.***

(a) The Underwriting Group offered the Hold-the-Offering-Price Maturities to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Bonds is attached to this Certificate as Schedule B.

(b) As set forth in the Bond Purchase Agreement for the Bonds, the Representative has agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the unsold Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) unsold Bonds of the Hold-the-Offering-Price Maturities shall be retained by the Representative and not allocated to any of the other Underwriters. Pursuant to such agreement, the Representative has not offered or sold any unsold Bonds of any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.]

3. ***Defined Terms.***

(a) *[General Rule Maturities* means those Maturities of the Bonds listed in Schedule A hereto as the “General Rule Maturities.”]

(b) *[Hold-the-Offering-Price Maturities* means those Maturities of the Bonds listed in Schedule A hereto as the “Hold-the-Offering-Price Maturities.”]

(c) *[Holding Period* means, with respect to a Hold-the-Offering-Price Maturity, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date, or (ii) the date on which the Underwriters have sold at least 10% of such Hold-

the-Offering-Price Maturity to the Public at prices that are no higher than the Initial Offering Price for such Hold-the-Offering-Price Maturity.]

(d) *Issuer* means Sacramento Municipal Utility District.

(e) *Maturity* means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(f) *Public* means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a Related Party (as such terms are defined below) to an Underwriter.

(g) A purchaser of any of the Bonds is a *Related Party* to any Underwriter if the Underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other).

(h) *Sale Date* means the first day on which there is a binding contract in writing for the sale of a Maturity of the Bonds. The Sale Date of the Bonds is [SALE DATE].

(i) *Underwriter* means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The representations set forth in this certificate are limited to factual matters only, and as it relates to the actions of the other Underwriters, such representations are made to the best of the Representative's knowledge based on the Representative's records. Nothing in this certificate represents the Representative's interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Issuer, in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds.

Dated: [CLOSING DATE]

Barclays Capital Inc.,
as representative of the Underwriting Group

By: _____
Name: _____

Schedule A

Sale Prices

\$(PAR) Electric Revenue Refunding Bonds, 2023 Series K

<u>Maturity</u> <u>(August 15)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield</u>	<u>Price</u>	<u>Hold-the-</u> <u>Price</u> <u>Maturities</u>	<u>General</u> <u>Rule</u> <u>Maturities</u>
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Schedule B

Pricing Wire or Equivalent Communication

Not applicable, because there are no Hold-the-Offering-Price Maturities

Attached

SACRAMENTO MUNICIPAL UTILITY DISTRICT

[\$[PAR] Subordinated Electric Revenue Refunding Bonds, 2023 Series C

CONTRACT OF PURCHASE

[SALE DATE]

Honorable Board of Directors
Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899

Dear Directors:

The undersigned Barclays Capital Inc. (the “Underwriter”) offers to enter into this Contract of Purchase (the “Contract of Purchase”) with the Sacramento Municipal Utility District (the “District”) which, upon the District’s acceptance, will be binding upon the District and upon the Underwriter. This offer is made subject to the District’s acceptance on or before 5:00 p.m., Sacramento time, on the date hereof, and if not so accepted, will be subject to withdrawal by the Underwriter upon notice delivered to the District at any time prior to the acceptance hereof by the District.

1. Purchase, Sale and Delivery of the Bonds. Subject to the terms and conditions and in reliance upon the representations, warranties and agreements herein set forth, the Underwriter hereby agrees to purchase from the District, and the District hereby agrees to sell to the Underwriter, all (but not less than all) of the $[\text{PAR}]$ aggregate principal amount of the Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “Bonds”), dated [CLOSING DATE], bearing interest (payable on the dates set forth in the Official Statement (as hereinafter defined) of the District relating to the Bonds) in each year until maturity or earlier redemption at the variable rates per annum determined in the manner set forth in the Official Statement. The purchase price for the Bonds shall be $[\text{PAR}]$.

(b) The Bonds shall be substantially in the form described in, shall be issued and secured under the provisions of, and shall be payable as provided in, Subordinate Resolution No. 85-11-1, adopted by the Board of Directors of the District on November 7, 1985 Subordinate Resolution (the “Subordinate Master Resolution”), as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001, as amended and

supplemented, including the amendments and supplements thereto made by Fourteenth Subordinate Resolution No. [23-05-___], adopted by the Board of Directors on [May 18, 2023] (the “Fourteenth Supplemental Subordinate Resolution”). The Subordinate Master Resolution, as restated, supplemented and amended as described in this Contract of Purchase, is herein called the “Subordinate Resolution.” The Bonds are authorized to be issued pursuant to applicable California law, including the Municipal Utility District Act (Sections 12850 to 12860 of the Public Utilities Code), Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (Section 53580 *et seq.*) and the Subordinate Resolution. The Bonds will be special obligations of the District payable exclusively from, and are secured by a pledge (effected in the manner and to the extent provided in the Subordinate Resolution) of, the Net Subordinated Revenues (as defined in the Subordinate Resolution). The Bonds shall be payable and shall be subject to redemption as provided in the Subordinate Resolution.

(c) The Bonds are being issued to [(i) refund the Refunded Bonds (as defined in the Official Statement) and (ii) pay certain costs associated with the issuance of the Bonds]. A portion of the proceeds of the Bonds, together with other available funds, will be deposited in an escrow fund established pursuant to an escrow agreement (the “Escrow Agreement”) between the District and the Trustee, in its capacity as Escrow Agent (in such capacity, the “Escrow Agent”).

(d) The District has heretofore delivered to the Underwriter copies of the Preliminary Official Statement dated [POS DATE] relating to the Bonds (the “Preliminary Official Statement”) in connection with the public offering of the Bonds. The Preliminary Official Statement was deemed final by the District as of the date thereof in accordance with paragraph (b)(1) of Rule 15c2-12 of the Securities and Exchange Commission (“Rule 15c2-12”), except for the information not required to be included therein under Rule 15c2-12.

(e) The District shall prepare and deliver to the Underwriter, as promptly as practicable, but in any event not later than two business days prior to the Closing Date (as defined below) or seven business days from the date hereof, a final official statement, with such changes and amendments as may be agreed to by the Underwriter, in such quantities as the Underwriter may reasonably request in order to comply with paragraph (b)(4) of Rule 15c2-12 and the rules of the Municipal Securities Rulemaking Board (“MSRB”) (such official statement, including the cover page and Appendices thereto, as the same may be supplemented or amended pursuant to paragraph (i) of Section 2 hereof, is herein referred to as the “Official Statement”). In addition, the District will provide, subject to customary disclaimers regarding the transmission of electronic copies, an electronic copy of the final Official Statement to the Underwriter in the currently required designated electronic format stated in MSRB Rule G-32 and the EMMA Dataport Manual (as defined below). The parties agree that the format in which the Preliminary Official Statement was delivered meets such electronic format requirements.

(f) Within one (1) business day after receipt of the Official Statement from the District, but by no later than the Closing Date, the Underwriter shall, at its own expense submit the Official Statement to EMMA (as defined below). The Underwriter will comply with the provisions of MSRB Rule G-32, including without limitation the submission of Form G-32 and the Official Statement and notify the District of the date on which the Official Statement has been filed with EMMA.

“EMMA” means the MSRB’s Electronic Municipal Market Access system, or any other electronic municipal securities information access system designated by the MSRB for collecting and disseminating primary offering documents and information.

“EMMA Dataport Manual” means the document(s) designated as such published by the MSRB from time to time setting forth the processes and procedures with respect to submissions to be made to the primary market disclosure service of EMMA by underwriter under Rule G-32(b).

(g) The District hereby ratifies, confirms and approves the use and distribution by the Underwriter prior to the date hereof of the Preliminary Official Statement and hereby authorizes the Underwriter to use and distribute the Official Statement, the Subordinate Resolution, and this Contract of Purchase, and all information contained in each, and all other documents, certificates and statements furnished by the District to the Underwriter in connection with the transactions contemplated by this Contract of Purchase, in connection with the offer and sale of the Bonds.

The District will covenant pursuant to a Continuing Disclosure Agreement dated as of the date of the issuance of the Bonds (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association (the “Trustee”), to provide annual reports and certain notices as described in Appendix G of the Official Statement.

(h) The District agrees and acknowledges that: (i) the Underwriter is not acting as a municipal advisor within the meaning of Section 15B of the Securities Exchange Act, as amended, (ii) the primary role of the Underwriter, as an underwriter, is to purchase securities, for resale to investors, in an arm’s length commercial transaction between the District and the Underwriter and the Underwriter has financial and other interests that differ from those of the District; (iii) the Underwriter is acting solely as a principal and is not acting as a municipal advisor, financial advisor or fiduciary to the District and has not assumed any advisory or fiduciary responsibility to the District with respect to the transaction contemplated hereby and the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriter has provided other services or are currently providing other services to the District on other matters); (iv) the only contractual obligations the Underwriter has to the District with respect to the transaction contemplated hereby expressly are set forth in this Contract of Purchase; and (v) the District has consulted its own financial and/or municipal, legal, accounting, tax and other advisors, as applicable, to the extent it has deemed appropriate.

(i) At 8:00 A.M., Sacramento time, on [CLOSING DATE] or at such earlier or later time or date as shall be agreed upon by the Underwriter and the District (such time and date being herein referred to as the “Closing Date”), the District will deliver the Bonds to The Depository Trust Company, New York, New York (“DTC”), for the account of the Underwriter, duly executed by the District, and the other documents herein mentioned; and the Underwriter will accept such delivery and pay the purchase price of the Bonds as set forth in paragraph (a) of this Section by wire transfer in San Francisco, California to the order of the District. Delivery of the documents herein mentioned shall be made at the offices of Orrick, Herrington & Sutcliffe LLP, 400 Capitol Mall, Suite 3000, Sacramento, California 95814, or such other place as shall have been mutually agreed upon by the District and the Underwriter, except that the Bonds shall be delivered

at the offices of DTC in New York, New York or at such other place and in such manner as shall have been mutually agreed upon by the District and the Underwriter.

The Bonds shall be issued initially in fully registered book-entry eligible form (which may be typewritten) in the form of a single registered bond for each maturity of the Bonds, shall bear CUSIP numbers and shall be registered in the name of Cede & Co., as nominee of DTC.

2. Representations, Warranties and Agreements of the District. The District hereby represents, warrants to and agrees with the Underwriter that:

(a) The District is a political subdivision of the State of California duly organized and validly existing pursuant to the Municipal Utility District Act as contained in Public Utilities Code Section 11501 *et seq.* (the “Act”) and has, and at the Closing Date will have, full legal right, power and authority (i) to enter into this Contract of Purchase, the Escrow Agreement, the Standby Bond Purchase Agreement between the District and TD Bank, N.A. (the “Bank”) dated as of [____], 2023 (the “Initial Liquidity Facility”) and a Remarketing Agreement between the District and Barclays Capital Inc., as Remarketing Agent (in such capacity, the “Remarketing Agent”) dated as of [____], 2023 (the “Remarketing Agreement”), and the Undertaking; (ii) to adopt the Subordinate Resolution; (iii) to pledge the Net Subordinated Revenues as set forth in the Subordinate Resolution; (iv) to issue, sell and deliver the Bonds to the Underwriter pursuant to the Subordinate Resolution as provided herein; (v) to acquire, construct, operate, maintain, improve and finance and refinance its Electric System (as defined in the Subordinate Resolution) and conduct the business thereof as set forth in and contemplated by the Preliminary Official Statement and the Official Statement; and (vi) to carry out, give effect to and consummate the transactions contemplated by this Contract of Purchase, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, the Undertaking, the Subordinate Resolution, and the Preliminary Official Statement and the Official Statement;

(b) The District has complied, and will at the Closing Date be in compliance, in all material respects, with the Act, the Subordinate Resolution, and with the obligations in connection with the issuance of the Bonds on its part contained in the Subordinate Resolution, the Initial Liquidity Facility, the Remarketing Agreement, the Escrow Agreement, the Bonds, the Act, the Undertaking and this Contract of Purchase;

(c) The District has duly and validly adopted the Subordinate Resolution, has duly authorized and approved the execution and delivery of the Bonds, this Contract of Purchase, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, the Undertaking and the Official Statement and has duly authorized and approved the performance by the District of its obligations contained in, and the taking of any and all action as may be necessary to carry out, give effect to and consummate the transactions contemplated by, each of said documents and, at the Closing Date, the Bonds will have been validly issued and delivered, the Subordinate Resolution, the Initial Liquidity Facility, the Escrow Agreement, the Remarketing Agreement, the Undertaking and this Contract of Purchase will constitute the valid, legal and binding obligations of the District enforceable in accordance with their respective terms (subject to the effect of, and restrictions and limitations imposed by or resulting from, (i) bankruptcy, insolvency, debt adjustment, moratorium, reorganization or other similar laws affecting creditors’ rights, and (ii) judicial discretion) and the Subordinate Resolution will be in full force and effect;

(d) The District is not in breach of or in default under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States of America, or of any department, division, agency or instrumentality of either or any applicable court or administrative decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District is otherwise subject or bound which in any material way, directly or indirectly, affects the issuance of the Bonds or the validity thereof, the validity or adoption of the Subordinate Resolution or the execution and delivery of the Bonds, this Contract of Purchase, the Initial Liquidity Facility, the Remarketing Agreement, the Escrow Agreement, the Undertaking or the other instruments contemplated by any of such documents to which the District is a party, and the adoption of the Subordinate Resolution and compliance with the provisions of each will not, as of the date hereof and as of the Closing Date, conflict with or constitute a breach of or default in any material way under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States, or of any department, division, agency or instrumentality of either or any applicable court or administrative judgment, decree or order, or any loan agreement, bond, note, ordinance, Subordinate Resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District or any of the property or assets of the Electric System (as defined in the Subordinate Resolution) are otherwise subject or bound, and no event which would have a material and adverse effect upon the financial condition of the District has occurred and is continuing which constitutes or with the passage of time or the giving of notice, or both, would constitute a default or event of default by the District under any of the foregoing;

(e) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Subordinate Resolution, the Undertaking, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, and this Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, this Contract of Purchase, the Initial Liquidity Facility, the Remarketing Agreement, the Undertaking, the Bonds or the Subordinate Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained;

(f) The Bonds, when issued and delivered in accordance with the Subordinate Resolution and this Contract of Purchase and paid for by the Underwriter on the Closing Date as provided herein, will be validly issued and outstanding special obligations of the District enforceable against the District in accordance with their terms and entitled to all the benefits and

security of the Subordinate Resolution; and, upon the issuance and delivery of the Bonds, the Subordinate Resolution will provide, for the benefit of the holders from time to time of the Bonds, a legally valid and binding pledge of and lien on Net Subordinated Revenues pledged under the Subordinate Resolution, as provided in and contemplated by the Subordinate Resolution;

(g) The Preliminary Official Statement, as of its date and as of the date hereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(h) At the time of the District's acceptance hereof and (unless the Official Statement is amended or supplemented pursuant to paragraph (i) of Section 2 hereof) at all times subsequent to the date of delivery thereof up to and including the Closing Date, the Official Statement will be true, correct, complete and final in all material respects and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(i) If, after the date of this Contract of Purchase and until 25 days after the end of the "underwriting period" (as defined in Rule 15c2-12), any event shall occur that might cause the Official Statement to contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the District hereby covenants and agrees, to the extent it has knowledge of such event, to notify the Underwriter (and for the purposes of this clause to provide the Underwriter with such information as they may from time to time reasonably request), and, if in the opinion of the Underwriter and its counsel such event requires the preparation and publication of a supplement or amendment to the Official Statement, at its expense to supplement or amend the Official Statement in a form and manner approved by the Underwriter and furnish to the Underwriter a reasonable number of copies of such supplement or amendment. For purposes of this Contract of Purchase, the District may assume that the end of the "underwriting period" has occurred on the Closing Date unless the District is otherwise notified by the Underwriter on or prior to the Closing Date. If the Underwriter notifies the District that the Closing Date is not the end of the "underwriting period", then the Underwriter shall further notify the District of the date that is the end of the "underwriting period" (as defined in Rule 15c2-12);

(j) If the Official Statement is supplemented or amended pursuant to paragraph (i) of Section 2 of this Contract of Purchase, at the time of each supplement or amendment thereto and (unless subsequently again supplemented or amended pursuant to such paragraph) at all times subsequent thereto during the "underwriting period", the Official Statement as so supplemented or amended will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which made, not misleading;

(k) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened (i) in any way affecting the corporate existence of the District or the titles

of its officers to their respective offices, (ii) affecting or seeking to prohibit, restrain or enjoin the issuance, sale or delivery of any of the Bonds, the application of the proceeds thereof in accordance with the Subordinate Resolution, or the collection or application of Revenues (as defined in the Subordinate Resolution) or the collection or application of the Net Subordinated Revenues pledged to pay the principal of and interest on the Bonds under the Subordinate Resolution or in any way contesting or affecting the validity or enforceability of any of the Bonds, the Initial Liquidity Facility, the Escrow Agreement, the Remarketing Agreement, the Subordinate Resolution, the Undertaking, this Contract of Purchase or any action of the District contemplated by any of said documents, (iii) which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, (iv) contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or the powers of the District or its authority with respect to the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery of the Undertaking, the Initial Liquidity Facility, the Escrow Agreement, the Remarketing Agreement, or this Contract of Purchase, or any action of the District contemplated by any of said documents, and (v) which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor;

(l) The District will furnish such information, execute such instruments and take such other action in cooperation with the Underwriter as the Underwriter may reasonably request (i) to qualify the Bonds for offer and sale under the “Blue Sky” or other securities laws and regulations of such states and other jurisdictions of the United States as the Underwriter may designate, and (ii) to determine the eligibility of the Bonds for investment under the laws of such states and other jurisdictions and will use its best efforts to continue such qualifications in effect so long as required for the distribution of the Bonds; provided that in connection therewith the District shall not be required to execute or file a general or special consent to service of process or qualify to do business in any jurisdiction and will advise the Underwriter promptly of receipt by the District of any written notification with respect to the suspension of the qualification of the Bonds for sale in any jurisdiction or written notification of the initiation or threat of any proceeding for that purpose;

(m) The audited financial statements of the District for the years ending December 31, 2022 and December 31, 2021 heretofore delivered to the Underwriter and incorporated by reference in the Preliminary Official Statement and the Official Statement as Appendix B fairly present the financial position of the District as of the dates indicated and such financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis;

(n) Between the date hereof and the Closing Date, the District will not, without the prior written consent of the Underwriter, offer or issue any bonds, notes or other obligations for borrowed money, or incur any material liabilities, direct or contingent, nor will there be any adverse change of a material nature in the financial position, results of operations or condition, financial or otherwise, of the District, in either case other than in the ordinary course of its business or as disclosed in the Preliminary Official Statement or the Official Statement or as otherwise disclosed to the Underwriter

(o) The Bonds, the Escrow Agreement, the Initial Liquidity Facility, the Subordinate Resolution, the Remarketing Agreement, and the Undertaking conform to the descriptions thereof contained in the Preliminary Official Statement and the Official Statement;

(p) The District has the legal authority to apply and will apply, or cause to be applied, the proceeds from the sale of the Bonds as provided in and subject to all of the terms and provisions of the Subordinate Resolution and as described in the Preliminary Official Statement and the Official Statement, including for payment of District expenses incurred in connection with the negotiation, marketing, issuance and delivery of the Bonds to the extent required by Section 7 (Expenses), and will not take or omit to take any action which action or omission will adversely affect the exclusion from gross income for federal income tax purposes of the interest on the Bonds;

(q) Any certificate signed by any official of the District, and delivered to the Underwriter, shall be deemed a representation and warranty by the District to the Underwriter as to the statements made therein; and

(r) Except as disclosed in the Preliminary Official Statement and the Official Statement, during the last five years the District has complied in all material respects with all previous undertakings required by Rule 15c2-12.

3. Conditions to the Obligations of the Underwriter. The obligations of the Underwriter to accept delivery of and pay for the Bonds on the Closing Date shall be subject to the performance by the District of its obligations to be performed hereunder at or prior to the Closing Date and to the fulfillment of the following conditions:

(a) The representations, warranties and covenants of the District contained herein shall be true, complete and correct on the date hereof and as of the Closing Date as if made on the Closing Date;

(b) At the Closing Date, the Subordinate Resolution shall have been duly adopted and shall be in full force and effect, and shall not have been repealed, amended, modified or supplemented, except as may have been agreed to in writing by the Underwriter, and there shall have been taken in connection therewith, with the issuance of the Bonds and with the transactions contemplated thereby and by this Contract of Purchase, all such actions as, in the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel (“Bond Counsel”), shall be necessary and appropriate;

(c) At the Closing Date, the Official Statement shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Underwriter;

(d) At or prior to the Closing Date, the Underwriter shall have received copies of the following documents, in each case satisfactory in form and substance to the Underwriter:

(1) The Official Statement executed on behalf of the District by its Chief Executive Officer and General Manager, any Member of its Executive Committee, its Treasurer, its Secretary or its Chief Financial Officer (each an “Authorized Representative”);

(2) The Undertaking executed on behalf of the District by an Authorized Representative;

(3) The Fourteenth Supplemental Subordinate Resolution, with only such supplements or amendments thereto as may have been agreed to by the Underwriter and certified by an authorized officer of the District under its seal as having been duly adopted by the District and as being in full force and effect, and the Subordinate Resolution, certified by an authorized officer of the District as being in full force and effect, with such supplements and amendments thereto adopted after the date hereof as may have been agreed to by the Underwriter;

(4) An opinion or opinions relating to the Bonds, dated the Closing Date and addressed to the District, of Bond Counsel, in substantially the form included in the Official Statement as Appendix F, together with a letter or letters of such Bond Counsel, dated the Closing Date and addressed to the Underwriter, to the effect that the foregoing opinion or opinions addressed to the District may be relied upon by the Underwriter to the same extent as if such opinion or opinions were addressed to them;

(5) An opinion or opinions, dated the Closing Date and addressed to the Underwriter of Bond Counsel, in substantially the form attached hereto as Exhibit E;

(6) An opinion, dated the Closing Date and addressed to the Underwriter, of General Counsel to the District, in substantially the form attached hereto as Exhibit C;

(7) An opinion, dated the Closing Date and addressed to the Underwriter, of Nixon Peabody LLP, as counsel for the Underwriter (“Underwriter’s Counsel”), to the effect that (i) the Bonds are exempt from the registration requirements of the Securities Act of 1933, as amended, and the Subordinate Resolution is exempt from qualification under the Trust Indenture Act of 1939, as amended; (ii) the Undertaking complies as to form in all material respects with the requirements of paragraph (b)(5) of the Rule applicable to the primary offering of the Bonds; and (iii) based upon the information made available to them in the course of their participation in the preparation of the Preliminary Official Statement and the Official Statement as counsel to the Underwriter and without having undertaken to determine independently, or assuming any responsibility for, the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement, they do not believe that (A) the Preliminary Official Statement, as of its date and as of the date of the Contract of Purchase, and (B) the Official Statement as of its date and as of the Closing Date, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except for the information relating to Cede & Co., DTC or the operation of the book-entry system, the Appendices to the Official Statement, except Appendices C, and F, and summaries thereof and references thereto, and other financial, accounting and statistical data included therein, as to all of which no view need be expressed); and (iii) with respect to such matters as the Underwriter may reasonably require;

(8) A certificate, dated the Closing Date, signed by an Authorized Representative of the District in substantially the form attached hereto as Exhibit D (but in lieu of or in conjunction with such certificate the Underwriter may, in its sole discretion, accept certificates or opinions of General Counsel to the District, or of other counsel acceptable to the Underwriter, that in the opinion of such counsel the issues raised in any pending or threatened litigation referred to in such certificate are without substance or that the contentions of all plaintiffs therein are without merit);

(9) An acceptance of and agreement to the provisions of the Fourteenth Supplemental Subordinate Resolution executed by the Trustee under the Subordinate Resolution in form and substance acceptable to the Underwriter;

(10) A tax certificate related to the Bonds in substance and form satisfactory to Bond Counsel;

(11) Ratings of the Bonds from S&P Global Ratings (“S&P”) of not less than “[AA (stable outlook)]” and from Fitch Ratings, Inc. (“Fitch”) of not less than “[AA (stable outlook)]”;

(12) The Escrow Agreement, executed by the District and the Escrow Agent;

(13) A report of [_____], as verification agent (the “Verification Agent”) with respect to the sufficiency of amounts deposited pursuant to the Escrow Agreement and an opinion of Bond Counsel respecting the defeasance of the Refunded Bonds;

(14) An opinion of counsel to the Trustee/Escrow Agent, dated the Closing Date, addressed to the Underwriter and the Bank, to the effect that (i) the Trustee/Escrow Agent is a national banking association duly organized and validly existing under the laws of the United States of America having full power and being qualified to enter into, accept and agree to the provisions of the Subordinate Resolution and to enter into and perform the Undertaking, (ii) the Undertaking has been duly authorized, executed and delivered by the Trustee/Escrow Agent and, assuming due authorization, execution and delivery by the other parties thereto, constitutes the valid and binding obligation of the Trustee/Escrow Agent enforceable in accordance with its terms, subject to laws relating to bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting creditors’ rights generally, to the application of equitable principals and to the exercise of judicial discretion in appropriate cases, and to enter into and perform the Undertaking, (iii) all approvals, consents and orders of any governmental authority or agency having jurisdiction in this matter that would constitute a condition precedent to the performance by the Trustee/Escrow Agent of its duties and obligations under the Subordinate Resolution and the Undertaking have been obtained and are in full force and effect, and (iv) the acceptance of the duties and obligations of the Trustee/Escrow Agent under the Subordinate Resolution and the Undertaking and the consummation of the transactions on the part of the Trustee/Escrow Agent contemplated therein, and the compliance by the Trustee/Escrow Agent, as applicable, with the terms, conditions and provisions of such

document do not contravene any provisions of applicable law or regulation or any order or decree, writ or injunction or the Articles of Association or Bylaws of the Trustee/Escrow Agent, and, to the best knowledge of such counsel, will not require the consent under or result in a breach of or a default under, any Subordinate Resolution, agreement or other instrument to which the Trustee/Escrow Agent is a party or by which it may be bound;

(15) An executed copy of the Initial Liquidity Facility;

(16) Opinion of Chapman and Cutler LLP, counsel to the Bank, with respect to the Initial Liquidity Facility;

(17) A certificate of an authorized officer of the Bank as to the accuracy of the information in Appendix H of the Official Statement;

(18) An executed copy of the Remarketing Agreement;

(19) A copy of the Blanket Letter of Representations to DTC relating to the Bonds signed by DTC and the District; and

(20) Such additional legal opinions, certificates, instruments and other documents as the Underwriter may reasonably request to evidence the truth and accuracy and completeness, as of the date hereof and as of the Closing Date, of the District's representations and warranties contained herein and of the statements and information contained in the Preliminary Official Statement or the Official Statement, and the due performance or satisfaction by the District at or prior to the Closing Date of all agreements then to be performed and all conditions then to be satisfied by the District in connection with the transactions contemplated hereby and by the Subordinate Resolution and the Preliminary Official Statement or the Official Statement.

If any of the conditions to the obligations of the Underwriter contained in this Section or elsewhere in this Contract of Purchase with respect to the Bonds shall not have been satisfied when and as required herein, all obligations of the Underwriter hereunder with respect to the Bonds may be terminated by the Underwriter at, or at any time prior to, the Closing Date by written notice to the District.

4. **Offering.** The obligations of the District to sell and to deliver the Bonds on the Closing Date to the Underwriter shall be subject to the following conditions:

(a) The entire \$[PAR] aggregate principal amount of the Bonds shall be purchased, accepted and paid for by the Underwriter on the Closing Date; and

(b) The District shall receive an Issue Price Certificate of the Underwriter substantially in the form attached hereto as Exhibit F with respect to the Bonds.

5. **Issue Price of the Bonds.** The Underwriter agrees to assist the District in establishing the issue price of the Bonds and shall execute and deliver to the District at Closing an "issue price" or similar certificate substantially in the form attached hereto as Exhibit F, together with the supporting pricing wires or equivalent communications, with modifications to such

certificate as may be deemed appropriate or necessary, in the reasonable judgment of the Underwriter, the District and Bond Counsel, to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds.

(b) [Except for the maturities set forth in Schedule A attached hereto,] the District will treat the first price at which 10% of each maturity of the Bonds (the “10% test”) is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test).

(c) [The Underwriter confirms that it has offered the Bonds to the public on or before the date of this Contract of Purchase at the offering price or prices (the “initial offering price”), or at the corresponding yield or yields, set forth in the final Official Statement. Schedule A sets forth, as of the date of this Contract of Purchase, the maturities, if any, of the Bonds for which the 10% test has not been satisfied and for which the District and the Underwriter agrees that (i) the Underwriter will retain all unsold Bonds of each maturity for which the 10% test has not been satisfied and (ii) the restrictions set forth in the next sentence shall apply, which will allow the District to treat the initial offering price to the public of each such maturity as of the sale date as the issue price of that maturity (the “hold-the-offering-price rule”). So long as the hold-the-offering-price rule remains applicable to any maturity of the Bonds, the Underwriter will neither offer nor sell unsold Bonds of that maturity to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following:

(1) the close of the fifth (5th) business day after the sale date; or

(2) the date on which the Underwriter has sold at least 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public.

The Underwriter shall promptly advise the District or the District’s municipal advisor when the Underwriter has sold 10% of that maturity of the Bonds to the public at [a price] that is no higher than the initial offering price to the public, if that occurs prior to the close of the fifth (5th) business day after the sale date.]

(d) [The Underwriter confirms that:

(1) any agreement among underwriters, any selling group agreement and each retail distribution agreement (to which the underwriter is a party) relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each underwriter, each dealer who is a member of the selling group, and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (A)(ii) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (ii) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Underwriter and as set forth in the related pricing wires, (B)

promptly notify the Underwriter of any sales of the Bonds that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the Bonds to the public (each such term being used as defined below) and (C) acknowledge that, unless otherwise advised by the dealer or broker-dealer, each order submitted by the dealer or broker-dealer is a sale to the public; and

(2) any agreement among underwriters relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating the Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the Bonds to the public to require each broker-dealer that is a party to such retail distribution agreement to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Underwriter and as set forth in the related pricing wires.]

(e) The Underwriter acknowledges that sales of any Bonds to any person that is a related party to the Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

(1) “public” means any person other than an underwriter or a related party,

(2) “underwriter” means (A) any person that agrees pursuant to a written contract with the District (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public),

(3) a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (i) more than 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

(4) “sale date” means the date of execution of this Contract of Purchase by all parties.

6. **Termination.** The Underwriter shall have the right to terminate their obligations under this Contract of Purchase to purchase, accept delivery of and to pay for the Bonds, if,

(a) between the date hereof and the Closing Date, the market price or marketability, or the ability of the Underwriter to enforce contracts for the sale, at the initial offering prices set forth in the Official Statement, of the Bonds have been materially adversely affected, in the judgment of the Underwriter, (evidenced by a written notice to the District terminating the obligation of the Underwriter to accept delivery of and pay for the Bonds), by reason of any of the following:

(1) (x) any legislation which is (A) enacted by Congress, (B) favorably reported for passage to either House of the Congress of the United States by any Committee of such House to which such legislation has been referred for consideration, or (C) recommended to the Congress for passage by the President of the United States or the Treasury Department, but only, however, if the occurrence of any of the foregoing events is generally accepted by the municipal bond market as potentially affecting the federal tax status of the District, its property or income or the interest on its bonds or notes (including the Bonds), (y) any decision rendered by a court established under Article III of the Constitution of the United States or the Tax Court of the United States, or (z) a final order, ruling, regulation or official statement issued or made by or on behalf of the Treasury Department of the United States or the Internal Revenue Service with the purpose or effect, directly or indirectly, of imposing federal income taxation upon such interest as would be received by the holders of the Bonds, or upon such revenues or other income of the general character expected to be received by the District; provided, however, that the enactment of legislation which only diminishes the value of, as opposed to eliminating the exclusion from gross income for federal income tax purposes will not give the Underwriter the right to terminate their obligations hereunder;

(2) Legislation enacted (or resolution passed) by the Congress or a final order, ruling, regulation or official statement is issued or made by or on behalf of the Securities and Exchange Commission, or any other governmental agency having jurisdiction of the subject matter, to the effect that obligations of the general character of the Bonds are not exempt from registration under or other requirements of the Securities Act of 1933, as amended, or are not exempt from qualification under, or other requirements of, the Trust Indenture Act of 1939, as amended, or that the issuance, offering or sale of the Bonds or obligations of the general character of the Bonds, including any or all underlying arrangements, as contemplated hereby or by the Preliminary Official Statement or the Official Statement, otherwise is or would be in violation of the federal securities laws as amended and then in effect;

(3) Any new material outbreak or escalation of hostilities having a material effect on the financial markets of the United States or the declaration by the United States of a national emergency or war or the occurrence of any other local, national or international calamity, crisis or event relating to the effective operation of the

government of or the financial community in the United States or an escalation thereof, including, without limitation, a downgrade of the sovereign debt rating of the United States by any major credit rating agency or payment default on United States Treasury obligations;

(4) the declaration of a general banking moratorium by federal, New York or California authorities, or the general suspension of trading on the New York Stock Exchange or any other national securities exchange, or any material disruption in commercial banking or securities settlement, or payment services or clearing services;

(5) the imposition by the New York Stock Exchange or other national securities exchange, or any governmental authority, of any material restrictions not now in force with respect to the Bonds or obligations of the general character of the Bonds or securities generally, or the material increase of any such restrictions now in force, including those relating to the net capital requirements of, the Underwriter;

(6) the adoption of any amendment to the federal or California Constitution, decision by any federal or California court, or enactment by any federal or California legislative body materially adversely affecting (i) the District or the right of the District to receive or to pledge any of the Net Subordinated Revenues, or (ii) the validity or enforceability of this Contract of Purchase, the Bonds or the Subordinate Resolution;

(7) the adoption of any amendment to the California Constitution, decision by any California court, or enactment by any California legislative body adversely affecting the exemption of state or local income tax upon such interest as would be received by the holders of the Bonds, or

(8) (i) a downgrading or suspension of any rating (without regard to credit enhancement) by Moody's, S&P, or Fitch of any debt securities issued by the District, or (ii) there shall have been any official statement as to a possible downgrading (such as being placed on "credit watch" or "negative outlook" or any similar qualification) of any rating by Moody's, S&P or Fitch of any debt securities issued by the District, including the Bonds.

(b) an event occurs, or information becomes known, which, in the judgment of the Underwriter, makes untrue in any material respect any statement or information contained in the Official Statement, or has the effect that the Official Statement contains any untrue statement of material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

7. Expenses. (a) Except as set forth in paragraph (b) of this Section, the Underwriter shall be under no obligation to pay, and the District shall pay, or cause to be paid, all expenses incident to the performance of the District's obligations hereunder including, but not limited to, the cost of word processing and reproducing, executing and delivering the Bonds to the Underwriter; the cost of preparation, printing (and/or word processing and reproducing),

distribution and delivery of the Subordinate Resolution; the cost of printing and distributing copies of the Preliminary Official Statement and the Official Statement in sufficient quantities for distribution in connection with the sale of the Bonds (including resales in the secondary market); the fees and disbursements of Bond Counsel; the fees and disbursements of Public Financial Management, Inc. for its services as Municipal Advisor to the District; the fees and disbursements of any other engineers, accountants, and any other experts or consultants retained in connection with the issuance of the Bonds; the fees and disbursements of the Trustee/Escrow Agent and Verification Agent; fees charged by the rating agencies for rating the Bonds; any advertising expenses; filing fees; CUSIP charges; or fees and expenses of any credit enhancement; expenses incurred by the Underwriter on behalf of the District relating to food, transportation or lodging for District staff members attending the bond pricing are to be reimbursed by the District through proceeds of the Bonds or available funds of the District (the District's obligations in regard to these expenses survive if delivery of the Bonds fails due to one of the conditions set forth in Section 3 hereof or this Contract of Purchase is terminated pursuant to Section 6 hereof) and any other expenses not specifically enumerated in paragraph (b) of this Section incurred in connection with the issuance of the Bonds.

(b) The District shall be under no obligation to pay, and the Underwriter shall pay (from the expense component of the underwriting discount), the cost of preparation of this Contract of Purchase; the cost of wiring funds for the payment of the purchase prices of the Bonds; the fees and expenses of DTC incurred with respect to depositing the Bonds therewith; expenses to qualify the Bonds for sale under any "Blue Sky" laws; fees to the California Debt and Investment Advisory Commission; and all other expenses incurred by the Underwriter in connection with its public offering and distribution of the Bonds not specifically enumerated in paragraph (a) of this Section, including the fees and disbursements of Underwriter's Counsel. Notwithstanding that the fees to the California Debt and Investment Advisory Commission are solely the legal obligation of the Underwriter, the District agrees to reimburse the Underwriter for such fees.

8. **Notices.** Any notice or other communication to be given to the District under this Contract of Purchase may be given by delivering the same in writing to Sacramento Municipal Utility District, at 6201 S Street, Sacramento, California 95817-1899; and any notice or other communication to be given to the Underwriters under this Contract of Purchase may be given by delivering the same in writing to Barclays Capital Inc., 10250 Constellation Blvd, Suite 750, Los Angeles, CA 90067, Attention: Christopher D. Roberts, Director.

9. **Parties in Interest.** This Contract of Purchase is made solely for the benefit of the District and the Underwriter (including successors or assigns of the Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof. The term "successors and assigns" as used in this Section shall not include any purchaser of the Bonds, as such purchaser, from the Underwriter.

10. **Survival of Representations and Warranties.** The representations and warranties of the District, set forth in or made pursuant to this Contract of Purchase, shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the closing or termination of this Contract of Purchase and regardless of any investigations or statements as to the results thereof made by or on behalf of the Underwriter and regardless of delivery of and payment for the Bonds.

11. **Counterparts.** This Contract of Purchase may be executed in several counterparts, which together shall constitute one and the same instrument.

12. **California Law Governs; Venue.** The validity, interpretation and performance of this Contract of Purchase shall be governed by the laws of the State of California. Any action or proceeding to enforce or interpret this Contract of Purchase shall be brought, commenced or prosecuted in the County of Sacramento, California.

[remainder of page intentionally left blank]

13. **Entire Agreement.** This Contract of Purchase when accepted by you in writing as heretofore specified shall constitute the entire agreement between us.

14. **Effectiveness.** This Contract of Purchase shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by an authorized officer of the District and shall be valid and enforceable as of the time of such acceptance.

Very truly yours,

BARCLAYS CAPITAL INC.

Christopher D. Roberts
Director

Accepted: [SALE DATE]

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Russell Mills
Treasurer

[Signature page to Contract of Purchase]

Exhibit A

SACRAMENTO MUNICIPAL UTILITY DISTRICT

\$(PAR) Subordinated Electric Revenue Refunding Bonds, 2023 Series C

Initial Mode	First day of Initial Period	<u>Last day of Initial Period</u>	Initial Interest <u>Rate</u>	<u>First Interest Payment Date</u>	<u>Maturity</u>
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SACRAMENTO MUNICIPAL UTILITY DISTRICT

**Exhibit B to the Contract of Purchase
(Official Statement)**

SACRAMENTO MUNICIPAL UTILITY DISTRICT

**Exhibit C to the Contract of Purchase
(Opinion of General Counsel to the
Sacramento Municipal Utility District)**

[CLOSING DATE]

Barclays Capital Inc.
10250 Constellation Blvd, Suite 750
Los Angeles, CA 90067

Re: Sacramento Municipal Utility District
§[PAR] Subordinated Electric Revenue Refunding Bonds, 2023 Series C

Ladies and Gentlemen:

This opinion is being delivered pursuant to Paragraph 3(d)(6) of the Contract of Purchase (the “Contract of Purchase”), dated [SALE DATE], between Barclays Capital Inc., as Underwriter named therein (the “Underwriter”), and the Sacramento Municipal Utility District (the “District”) relating to the above-captioned bonds (the “Bonds”).

As counsel to the District, I have reviewed (i) Subordinate Resolution No. 85-11-1 of the District, adopted on November 7, 1985 (the “Subordinate Master Resolution”), as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001, as amended and supplemented, including the amendments and supplements thereto made by Subordinate Resolution No. [23-05-___], adopted on [May 18, 2023] (as so amended and supplemented, the “Subordinate Resolution”); (ii) the Continuing Disclosure Agreement, dated the date hereof (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association, as trustee (in such capacity, the “Trustee”); (iii) the Preliminary Official Statement of the District, dated [POS DATE] (the “Preliminary Official Statement”); (iv) the Official Statement of the District, dated [SALE DATE] (the “Official Statement”) (v) the Standby Bond Purchase Agreement, dated as of [___], 2023 (the “Initial Liquidity Facility”), between the District and TD Bank, N.A. (the “Bank”); (vi) the Remarketing Agreement, between the District and Barclays Capital Inc., as remarketing agent, dated [___], 2023 (the “Remarketing Agreement”); (vii) the escrow agreement, dated the date hereof (the “Escrow Agreement”), between the District and U.S. Bank Trust Company, National Association, as escrow agent (in such capacity, the “Escrow Agent”), and (viii) such other documents, opinions and matters to the extent I deemed necessary to provide the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. I have assumed the genuineness of all documents and signatures presented to me (whether as originals or as copies) and the due and legal execution and delivery by, and validity against, any parties other than the District. I have not undertaken to verify independently, and have assumed, the accuracy of the factual matters represented, warranted or certified in the

documents referred to in the second paragraph hereof. I have further assumed compliance with all covenants and agreements contained in such documents.

I call attention to the fact that the rights and obligations under the Subordinate Resolution, the Initial Liquidity Facility, the Escrow Agreement, the Remarketing Agreement, the Undertaking, and the Contract of Purchase may be subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, and to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. I express no opinion with respect to any indemnification, contribution, choice of law, choice of forum or waiver provisions contained therein.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, I am of the opinion that:

1. The District is a political subdivision of the State of California duly organized and validly existing under the Act, as amended, and has full legal right, power and authority to execute and deliver (or adopt, as the case may be), and to perform its obligations under, the Subordinate Resolution, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, the Undertaking and the Contract of Purchase.

2. The Contract of Purchase, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, and the Undertaking have each been duly authorized, executed and delivered by the District, and, assuming due authorization, execution and delivery by each of the parties thereto other than the District, constitute the legal, valid and binding obligations of the District, enforceable against the District in accordance with their respective terms.

3. The District is not in breach of or default under any existing constitutional provision, applicable law or administrative regulation of the State of California or the United States or any applicable judgment or decree or any loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject which would have a material adverse effect on the financial condition or operations of the District, and no event has occurred and is continuing which with the passage of time or the giving of notice, or both, would constitute a default or event of default under any such instrument which would have a material adverse effect on the financial condition or operations of the District; and the execution and delivery of the Bonds, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, the Undertaking and the Contract of Purchase and the adoption of the Subordinate Resolution, and compliance with any existing constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject will not, as of the date hereof, conflict with or constitute a breach of or default under any such instrument which would have a material adverse effect on the financial condition or operations of the District, nor will any such execution, delivery, adoption or compliance result in the creation or imposition of any lien, charge or other security interest or encumbrance of any nature whatsoever upon any of the property or assets of

the District or under the terms of any such law, regulation or instrument, except as expressly provided by the Bonds and the Subordinate Resolution.

4. The statements contained in the Preliminary Official Statement and Official Statement which purport to describe certain provisions of the Bonds, the Initial Liquidity Facility, the Remarketing Agreement, the Undertaking, the Escrow Agreement, and the Subordinate Resolution present a fair and accurate summary of such provisions for the purpose of use in the Preliminary Official Statement and the Official Statement.

5. Except as described or referred to in the Preliminary Official Statement and the Official Statement, as of the date hereof, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body, pending or, to the best of my knowledge, threatened against the District affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of the Revenues (as defined in the Subordinate Resolution) or the Net Subordinated Revenues (as defined in the Subordinate Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds or contesting or affecting as to the District the validity or enforceability of the Act, the Bonds, the Subordinate Resolution, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, the Contract of Purchase or the Undertaking, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery by the District of the Contract of Purchase, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act or the authorization, execution, delivery or performance by the District of the Bonds, the Subordinate Resolution, the Initial Liquidity Facility, the Escrow Agreement, the Remarketing Agreement, the Undertaking, or the Contract of Purchase.

6. Based upon my review of the Preliminary Official Statement and the Official Statement as General Counsel to the District and without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement (except as specifically set forth in paragraph 4 hereof), I have no reason to believe that the statements contained in the Preliminary Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, and the Bank, and the Appendices (except Appendices A) to the Preliminary Official Statement, and other financial and statistical data included therein, as to all of which I express no view) as of its date and as of the date of the Contract of Purchase contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and the Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Bank and the Appendices (except Appendix A) to the Official Statement, and other financial and

statistical data included therein, as to all of which I express no view) (A) as of the date of the Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading or (B) as of the date hereof contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

For purposes of the opinions expressed herein, I have assumed that an agreement or other document is “material” to the District if it involves amounts in excess of \$10,000,000 and that a matter would result in a “material adverse change” to the District if the financial consequences involved would exceed \$10,000,000.

I understand that you are relying upon the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, with respect to the validity of the Bonds and the exclusion of interest on the Bonds from gross income for federal income tax purposes and the Bonds for purposes of State of California income taxation and, accordingly, render no opinion with respect thereto.

Very truly yours,

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Exhibit D to the Contract of Purchase

CERTIFICATE

The Sacramento Municipal Utility District (the “District”), hereby certifies that:

(1) The representations and warranties of the District (excluding those representations and warranties contained in Section 2(e) and Section 2(k) of the hereinafter defined Contract of Purchase) contained in the Contract of Purchase, dated [SALE DATE], between the District and the Underwriter named therein (the “Contract of Purchase”) with respect to the sale by the District of \$[PAR] aggregate principal amount of its Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “Bonds”), are true and correct on and as of the Closing Date as if made on the Closing Date.

(2) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Subordinate Resolution, the Initial Liquidity Facility, the Remarketing Agreement, the Escrow Agreement, the Undertaking, and the Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, the Contract of Purchase, the Initial Liquidity Facility, the Escrow Agreement, the Remarketing Agreement, the Undertaking, the Bonds or the Subordinate Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained.

(3) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the best of knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened against the District, in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of any of the Bonds or the collection of the Revenues (as defined in the Subordinate Resolution) or the Net Subordinated Revenues (as defined

in the Subordinate Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds, or in any way contesting or affecting as to the District the validity or enforceability of the Act, the Bonds, the Subordinate Resolution, the Contract of Purchase, the Initial Liquidity Facility, the Remarketing Agreement, the Escrow Agreement, the Undertaking, or any action of the District contemplated by any of said documents, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution system, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery by the District of the Contract of Purchase, the Escrow Agreement, the Initial Liquidity Facility, the Remarketing Agreement, or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act of the authorization, execution, delivery or performance by the District of the Bonds, the Subordinate Resolution, the Initial Liquidity Facility, the Escrow Agreement, the Remarketing Agreement, the Undertaking, or the Contract of Purchase, or any action of the District contemplated by any of said documents, or which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor.

(4) No event affecting the District has occurred (with respect to the Preliminary Official Statement, from its date to the date of the Contract of Purchase, and with respect to the Official Statement, since the date of the Official Statement) which should have been or should be disclosed in the Preliminary Official Statement or the Official Statement so that the Preliminary Official Statement or the Official Statement did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and which has not been disclosed in a supplement or amendment to the Preliminary Official Statement or the Official Statement.

(5) The District has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the date hereof pursuant to the Contract of Purchase with respect to the issuance of the Bonds.

(6) All capitalized terms employed herein which are not otherwise defined shall have the same meanings as in the Contract of Purchase.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____

Name:

Title:

Dated: [CLOSING DATE]

**Exhibit E to the Contract of Purchase
(Supplemental Opinion of Bond Counsel)**

[TO BE UPDATED BY BOND COUNSEL]

[CLOSING DATE]

Barclays Capital Inc.
10250 Constellation Blvd, Suite 750
Los Angeles, CA 90067

Sacramento Municipal Utility District
Subordinated Electric Revenue Refunding Bonds, 2023 Series C
(Supplemental Opinion)

Ladies and Gentlemen:

This letter is addressed to you, as Underwriter, pursuant to Section 3(d)(5) of the Contract of Purchase, dated [SALE DATE] (the “Purchase Contract”), between you and the Sacramento Municipal Utility District (“SMUD”), providing for the purchase of \$[PAR] aggregate principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “Bonds”). The Bonds are being issued pursuant to Subordinate Resolution No. 85-11-1 of the Board of Directors of SMUD, adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001, as supplemented and amended by later Subordinate Resolutions of said Board of Directors (as so supplemented and amended, the “Subordinate Resolution”), including Subordinate Resolution No. [23-05-___], adopted on [May 18, 2023]. Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Subordinate Resolution or, if not defined in the Subordinate Resolution, in the Purchase Contract.

In connection with our role as Bond Counsel to SMUD, we have reviewed the Purchase Contract; the Subordinate Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; certain portions of the posted preliminary official statement of SMUD, dated [POS DATE] with respect to the Bonds (the “Preliminary Official Statement”) and of the posted official statement of SMUD, dated [SALE DATE], with respect to the Bonds (the “Official Statement”); opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to render the opinions and conclusions set forth herein.

The opinions and conclusions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions or conclusions may be affected by actions taken or omitted or events occurring after the original delivery of the Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the original delivery of the Bonds on the

date hereof. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. We have further assumed compliance with all covenants and agreements contained in such documents. In addition, we call attention to the fact that the rights and obligations under the Bonds, the Subordinate Resolution, the Tax Certificate and the Purchase Contract and their enforceability may be subject to bankruptcy, insolvency, reorganization, receivership, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinions with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Subordinate Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions and conclusions:

1. The Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Subordinate Resolution is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended.

2. The Purchase Contract has been duly executed and delivered by, and constitutes a valid and binding obligation of, SMUD.

3. The statements contained in the Preliminary Official Statement and the Official Statement under the captions [“THE SUBORDINATED 2023 SERIES C BONDS” (excluding information relating to book-entry or The Depository Trust Company), “SECURITY FOR THE BONDS” and “TAX MATTERS” and in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION,” and APPENDIX E – “SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION”] [**To be updated when POS is available**] excluding any material that may be treated as included under such captions by cross-reference or reference to other documents or sources, insofar as such statements expressly summarize certain provisions of the Subordinate Resolution or set out the content of our final legal opinion as Bond Counsel to SMUD concerning the validity of the Bonds and certain other matters, dated the date hereof and addressed to SMUD, are accurate in all material respects.

4. We are not passing upon and do not assume any responsibility for the accuracy, completeness or fairness of any of the statements contained in the Preliminary Official Statement or (except as explicitly stated in paragraph 3 above) in the Official Statement and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. In our capacity as Bond Counsel to SMUD in connection with issuance of

the Bonds, we participated in conferences with your representatives, your counsel, representatives of SMUD, its counsel, accountants, and others, during which the contents of the Preliminary Official Statement or the Official Statement and related matters were discussed. Based on our participation in the above-mentioned conferences (which, with respect to the Preliminary Official Statement, did not extend beyond the date of the Purchase Contract, and with respect to the Official Statement, did not extend beyond its date), and in reliance thereon, on oral and written statements and representations of SMUD and others and on the records, documents, certificates, opinions and matters herein mentioned, subject to the limitations on our role as Bond Counsel to SMUD, we advise you as a matter of fact and not opinion that (a) no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Preliminary Official Statement which caused us to believe as of its date and as of the date of the Purchase Contract, based on the documents, drafts and facts in existence and reviewed as of that date, that the Preliminary Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except any information marked as preliminary or subject to change, any information permitted to be omitted by Securities and Exchange Commission Rule 15c2-12 or otherwise left blank and any other differences with the information in the Official Statement), and (b) no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Official Statement which caused us to believe as of the date of the Official Statement and as of the date hereof that the Official Statement contained or contains any untrue statement of a material fact or omitted or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, we expressly exclude from the scope of this paragraph and express no opinion or conclusion, with respect to both the Preliminary Official Statement and the Official Statement, about any CUSIP numbers, financial, accounting, statistical or economic, engineering or demographic data or forecasts, numbers, charts, tables, graphs, estimates, projections, assumptions or expressions of opinion, any statements about compliance with prior continuing disclosure undertakings, any management discussion and analysis, any information about Cede & Co., The Depository Trust Company or book-entry, the Initial Liquidity Facility, or the Bank, information under the caption "THE INITIAL LIQUIDITY FACILITY," ratings, rating agencies, financial advisors, swap advisors, underwriters, underwriting and the information contained in Appendices B and C included or referred to therein or omitted therefrom. No responsibility is undertaken or conclusion expressed with respect to any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement or the Official Statement.

This letter is furnished by us as Bond Counsel to SMUD. No attorney-client relationship has existed or exists between our firm and you in connection with the Bonds or by virtue of this letter. We disclaim any obligation to update this letter. This letter is delivered to you as Underwriter of the Bonds, is solely for your benefit as such Underwriter in connection with the original delivery of the Bonds on the date hereof, and is not to be used, circulated, quoted or otherwise referred to or relied upon for any other purpose or by any other person.

This letter is not intended to, and may not, be relied upon by owners of Bonds or by any other party to whom it is not specifically addressed.

Very truly yours,

Exhibit F to the Contract of Purchase

(Form of Issue Price Certificate Of The Underwriter Regarding Offering Prices)

SACRAMENTO MUNICIPAL UTILITY DISTRICT

[\$[PAR] Subordinated Electric Revenue Refunding Bonds, 2023 Series C

The undersigned, on behalf of Barclays Capital Inc. (the “Underwriter”) hereby certifies as set forth below with respect to the sale and issuance of the above-captioned obligations (the “Bonds”).

1. ***Sale of the [General Rule Maturities][Bonds]***. As of the date of this Certificate, for each Maturity of the [General Rule Maturities][Bonds], the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A.

2. ***[Initial Offering Price of the Hold-the-Offering-Price-Maturities]***.

(a) The Underwriter offered the Hold-the-Offering-Price Maturities to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Bonds is attached to this Certificate as Schedule B.

(b) As set forth in the Bond Purchase Agreement for the Bonds, the Underwriter has agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the unsold Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) unsold Bonds of the Hold-the-Offering-Price Maturities shall be retained by the Underwriter. Pursuant to such agreement, the Underwriter has not offered or sold any unsold Bonds of any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.]

3. ***Defined Terms.***

(a) [*General Rule Maturities* means those Maturities of the Bonds listed in Schedule A hereto as the “General Rule Maturities.”]

(b) [*Hold-the-Offering-Price Maturities* means those Maturities of the Bonds listed in Schedule A hereto as the “Hold-the-Offering-Price Maturities.”]

(c) [*Holding Period* means, with respect to a Hold-the-Offering-Price Maturity, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date, or (ii) the date on which the Underwriter has sold at least 10% of such Hold-the-Offering-Price Maturity to the Public at prices that are no higher than the Initial Offering Price for such Hold-the-Offering-Price Maturity.]

(d) *Issuer* means Sacramento Municipal Utility District.

(e) *Maturity* means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(f) *Public* means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a Related Party (as such terms are defined below) to the Underwriter.

(g) A purchaser of any of the Bonds is a *Related Party* to the Underwriter if the Underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other).

(h) *Sale Date* means the first day on which there is a binding contract in writing for the sale of a Maturity of the Bonds. The Sale Date of the Bonds is [SALE DATE].

(i) *Underwriter* means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents the Underwriter's interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Issuer, in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds.

Dated: [CLOSING DATE]

Barclays Capital Inc.,

By: _____
Name: _____

Schedule A

Sale Prices

[\$[PAR] Subordinated Electric Revenue Refunding Bonds, 2023 Series C

Initial Mode	First day of Initial Period	Last Day of Initial Period	<u>Initial Interest Rate</u>	<u>First Interest Payment Date</u>	<u>Maturity</u>	<u>Hold-the- Price Maturities</u>	<u>General Rule Maturities</u>
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Schedule B

Pricing Wire or Equivalent Communication

Not applicable, because there are no Hold-the-Offering-Price Maturities

Attached

SACRAMENTO MUNICIPAL UTILITY DISTRICT

**[\$[SERIES D PAR] Subordinated Electric Revenue Bonds, [2023 Series D]
and
[\$[SERIES E PAR] Subordinated Electric Revenue Bonds, [2023 Series E]**

CONTRACT OF PURCHASE

[SALE DATE]

Honorable Board of Directors
Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899

Dear Directors:

The undersigned BofA Securities, Inc. and [UNDERWRITING GROUP TO COME] (herein collectively referred to as the “Underwriters”), acting for and on behalf of themselves, offer to enter into this Contract of Purchase (the “Contract of Purchase”) with the Sacramento Municipal Utility District (the “District”) which, upon the District’s acceptance, will be binding upon the District and upon the Underwriters. BofA Securities, Inc., has been duly authorized to execute this Contract of Purchase and to act hereunder by and based on representations made to it under an Agreement Among Underwriters dated _____, 2023 on behalf of the Underwriters as the Senior Managing Underwriter (the “Senior Underwriter”). This offer is made subject to the District’s acceptance on or before 5:00 p.m., Sacramento time, on the date hereof, and if not so accepted, will be subject to withdrawal by the Underwriters upon notice delivered to the District at any time prior to the acceptance hereof by the District.

1. Purchase, Sale and Delivery of the [2023 Series D/E] Bonds. Subject to the terms and conditions and in reliance upon the representations, warranties and agreements herein set forth, the Underwriters, jointly and severally, hereby agree to purchase from the District, and the District hereby agrees to sell to the Underwriters, all (but not less than all) of the \$[SERIES D PAR] aggregate principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds, [2023 Series D] (the “[2023 Series D] Bonds”), and the \$[SERIES E PAR] aggregate principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds, [2023 Series E] (the “[2023 Series E] Bonds” and, together with the [2023 Series D Bonds] the “[2023 Series D/E] Bonds”), each dated [CLOSING DATE], and each bearing

interest payable on the dates as set forth in the Official Statement (as hereinafter defined) of the District relating to the [2023 Series D/E] Bonds in each year until maturity or earlier redemption at the rates per annum and maturing on the dates and in the amounts set forth in the Official Statement. The purchase price for the [2023 Series D] Bonds shall be \$[SERIES D PURCHASE PRICE] (consisting of the principal amount of the [2023 Series D] Bonds of \$[SERIES D PAR] plus [net] original issue premium of \$[SERIES D OIP]) and minus an Underwriter's discount of \$[SERIES D UWD]. The purchase price for the [2023 Series E] Bonds shall be \$[SERIES E PURCHASE PRICE] (consisting of the principal amount of the [SERIES E] Bonds of \$[SERIES E PAR] plus [net] original issue premium of \$[SERIES E OIP]) and minus an Underwriter's discount of \$[SERIES E UWD].

(b) The [2023 Series D/E] Bonds shall be substantially in the form described in, shall be issued and secured under the provisions of, and shall be payable as provided in, Resolution No. 85-11-1, adopted by the Board of Directors of the District on November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001 (the "Subordinate Master Resolution"), as heretofore amended and supplemented, including the amendments and supplements thereto made by Resolutions Nos. [RESO Nos.] respectively, adopted by the Board of Directors on [May 18, 2023] (the "[Fifteenth and Sixteenth] Supplemental Resolutions"). The Subordinate Master Resolution, as supplemented and amended as described in this Contract of Purchase, is herein called the "Subordinate Resolution." The [2023 Series D/E] Bonds are authorized to be issued pursuant to applicable California law, including the Municipal Utility District Act (Sections 12850 to 12860 of the Public Utilities Code), the Revenue Bond Law of 1941 (Government Code Section 54300 *et seq.*), Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (Section 53580 *et seq.*) and the Subordinate Resolution. The [2023 Series D/E] Bonds will be special obligations of the District payable exclusively from, and are secured by a pledge (effected in the manner and to the extent provided in the Subordinate Resolution) of, the Net Subordinated Revenues (as defined in the Subordinate Resolution). The [2023 Series D/E] Bonds shall be payable and shall be subject to redemption as provided in the Subordinate Resolution.

(c) [A portion of the proceeds of the [2023 Series D/E] Bonds will be used to finance and refinance certain improvements and additions to SMUD's Electric System, including through the refunding of SMUD's commercial paper notes and pay certain costs associated with the issuance of the 2023 Subordinated Bonds.].

(d) The District has heretofore delivered to the Underwriters copies of the Preliminary Official Statement dated [POS DATE], relating to the [2023 Series D/E] Bonds (the "Preliminary Official Statement") in connection with the public offering of the [2023 Series D/E] Bonds. The Preliminary Official Statement was deemed final by the District as of the date thereof in accordance with paragraph (b)(1) of Rule 15c2-12 of the Securities and Exchange Commission ("Rule 15c2-12"), except for the information not required to be included therein under Rule 15c2-12.

(e) The District shall prepare and deliver to the Underwriters, as promptly as practicable, but in any event not later than two business days prior to the Closing Date (as defined below) or seven business days from the date hereof, a final official statement, with such

changes and amendments as may be agreed to by the Underwriters, in such quantities as the Underwriters may reasonably request in order to comply with paragraph (b)(4) of Rule 15c2-12 and the rules of the Municipal Securities Rulemaking Board (“MSRB”) (such official statement, including the cover page and Appendices thereto, as the same may be supplemented or amended pursuant to paragraph (i) of Section 2 hereof, is herein referred to as the “Official Statement”). In addition, the District will provide, subject to customary disclaimers regarding the transmission of electronic copies, an electronic copy of the final Official Statement to the Underwriters in the currently required designated electronic format stated in MSRB Rule G-32 and the EMMA Dataport Manual (as defined below). The parties agree that the format in which the Preliminary Official Statement was delivered meets such electronic format requirements.

(f) Within one (1) business day after receipt of the Official Statement from the District, but by no later than the Closing Date, the Underwriters shall, at their own expense submit the Official Statement to EMMA (as defined below). The Underwriters will comply with the provisions of MSRB Rule G-32, including without limitation the submission of Form G-32 and the Official Statement and notify the District of the date on which the Official Statement has been filed with EMMA.

“EMMA” means the MSRB’s Electronic Municipal Market Access system, or any other electronic municipal securities information access system designated by the MSRB for collecting and disseminating primary offering documents and information.

“EMMA Dataport Manual” means the document(s) designated as such published by the MSRB from time to time setting forth the processes and procedures with respect to submissions to be made to the primary market disclosure service of EMMA by underwriters under Rule G-32(b).

(g) The District hereby ratifies, confirms and approves the use and distribution by the Underwriters prior to the date hereof of the Preliminary Official Statement and hereby authorizes the Underwriters to use and distribute the Official Statement, the Subordinate Resolution and this Contract of Purchase, and all information contained in each, and all other documents, certificates and statements furnished by the District to the Underwriters in connection with the transactions contemplated by this Contract of Purchase, in connection with the offer and sale of the [2023 Series D/E] Bonds.

The District will covenant pursuant to a Continuing Disclosure Agreement dated as of the date of the issuance of the [2023 Series D/E] Bonds (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association (the “Trustee”), to provide annual reports and certain notices as described in Appendix [G] of the Official Statement.

(h) The District acknowledges and agrees that: (i) the Underwriters are not acting as municipal advisors within the meaning of Section 15B of the Securities Exchange Act, as amended, (ii) the primary role of the Underwriters, as underwriters, is to purchase securities, for resale to investors, in an arm’s length commercial transaction between the District and the Underwriters and the Underwriters have financial and other interests that differ from those of the District; (iii) the Underwriters are acting solely as principals and are not acting as municipal advisors, financial advisors or fiduciaries to the District and have not assumed any advisory or

fiduciary responsibility to the District with respect to the transaction contemplated hereby and the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriters have provided other services or are currently providing other services to the District on other matters); (iv) the only contractual obligations the Underwriters, as underwriters, have to the District with respect to the transaction contemplated hereby expressly are set forth in this Contract of Purchase; and (v) the District has consulted its own financial and/or municipal, legal, accounting, tax and other advisors, as applicable, to the extent it has deemed appropriate.

(i) At 8:00 A.M., Sacramento time, on [CLOSING DATE] or at such earlier or later time or date as shall be agreed upon by the Underwriters and the District (such time and date being herein referred to as the “Closing Date”), the District will deliver the [2023 Series D/E] Bonds to The Depository Trust Company, New York, New York (“DTC”), for the account of the Underwriters, duly executed by the District, and the other documents herein mentioned; and the Underwriters will (i) accept such delivery and pay the purchase price of the [2023 Series D/E] Bonds as set forth in paragraph (a) of this Section by wire transfer in San Francisco, California to the order of the District. Delivery of the documents herein mentioned shall be made at the offices of Orrick, Herrington & Sutcliffe LLP, 400 Capitol Mall, Suite 3000, Sacramento, California 95814, or such other place as shall have been mutually agreed upon by the District and the Underwriters, except that the [2023 Series D/E] Bonds shall be delivered at the offices of DTC in New York, New York or at such other place and in such manner as shall have been mutually agreed upon by the District and the Underwriters.

The [2023 Series D/E] Bonds shall be issued initially in fully registered book-entry eligible form (which may be typewritten) in the form of a single registered bond for each maturity of the [2023 Series D/E] Bonds, shall bear CUSIP numbers and shall be registered in the name of Cede & Co., as nominee of DTC.

2. Representations, Warranties and Agreements of the District. The District hereby represents, warrants to and agrees with the Underwriters that:

(a) The District is a political subdivision of the State of California duly organized and validly existing pursuant to the Municipal Utility District Act as contained in Public Utilities Code Section 11501 *et seq.* (the “Act”) and has, and at the Closing Date will have, full legal right, power and authority (i) to enter into this Contract of Purchase and the Undertaking, (ii) to adopt the Subordinate Resolution, (iii) to pledge the Net Subordinated Revenues as set forth in the Subordinate Resolution, (iv) to issue, sell and deliver the [2023 Series D/E] Bonds to the Underwriters pursuant to the Subordinate Resolution as provided herein, (v) to acquire, construct, operate, maintain, improve and finance its Electric System (as defined in the Subordinate Resolution) and conduct the business thereof as set forth in and contemplated by the Preliminary Official Statement and the Official Statement, and (vi) to carry out, give effect to and consummate the transactions contemplated by this Contract of Purchase, the Undertaking, the Subordinate Resolution and the Preliminary Official Statement and the Official Statement;

(b) The District has complied, and will at the Closing Date be in compliance, in all material respects, with the Act, the Subordinate Resolution, and with the obligations in connection with the issuance of the [2023 Series D/E] Bonds on its part contained in the

Subordinate Resolution, the [2023 Series D/E] Bonds, the Act, the Undertaking and this Contract of Purchase;

(c) The District has duly and validly adopted the Subordinate Resolution, has duly authorized and approved the execution and delivery of the [2023 Series D/E] Bonds, this Contract of Purchase, the Undertaking and the Official Statement and has duly authorized and approved the performance by the District of its obligations contained in, and the taking of any and all action as may be necessary to carry out, give effect to and consummate the transactions contemplated by, each of said documents and, at the Closing Date, the [2023 Series D/E] Bonds will have been validly issued and delivered, the Subordinate Resolution, the Undertaking and this Contract of Purchase will constitute the valid, legal and binding obligations of the District enforceable in accordance with their respective terms (subject to the effect of, and restrictions and limitations imposed by or resulting from, (i) bankruptcy, insolvency, debt adjustment, moratorium, reorganization or other similar laws affecting creditors' rights, and (ii) judicial discretion) and the Subordinate Resolution will be in full force and effect;

(d) The District is not in breach of or in default under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States of America, or of any department, division, agency or instrumentality of either or any applicable court or administrative decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District is otherwise subject or bound which in any material way, directly or indirectly, affects the issuance of the [2023 Series D/E] Bonds or the validity thereof, the validity or adoption of the Subordinate Resolution or the execution and delivery of the [2023 Series D/E] Bonds, this Contract of Purchase, the Undertaking or the other instruments contemplated by any of such documents to which the District is a party, and the adoption of the Subordinate Resolution and compliance with the provisions of each will not, as of the date hereof and as of the Closing Date, conflict with or constitute a breach of or default in any material way under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States, or of any department, division, agency or instrumentality of either or any applicable court or administrative judgment, decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District or any of the property or assets of the Electric System (as defined in the Subordinate Resolution) are otherwise subject or bound, and no event which would have a material and adverse effect upon the financial condition of the District has occurred and is continuing which constitutes or with the passage of time or the giving of notice, or both, would constitute a default or event of default by the District under any of the foregoing;

(e) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the [2023 Series D/E] Bonds under the Subordinate Resolution, the Undertaking and this Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the "Blue Sky" or other securities laws of any state in connection with the

offering and sale of the [2023 Series D/E] Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, this Contract of Purchase, the Undertaking, the [2023 Series D/E] Bonds or the Subordinate Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained;

(f) The [2023 Series D/E] Bonds, when issued and delivered in accordance with the Subordinate Resolution and this Contract of Purchase and paid for by the Underwriters on the Closing Date as provided herein, will be validly issued and outstanding special obligations of the District enforceable against the District in accordance with their terms and entitled to all the benefits and security of the Subordinate Resolution; and, upon the issuance and delivery of the [2023 Series D/E] Bonds, the Subordinate Resolution will provide, for the benefit of the holders from time to time of the [2023 Series D/E] Bonds, a legally valid and binding pledge of and lien on Net Subordinated Revenues pledged under the Subordinate Resolution, as provided in and contemplated by the Subordinate Resolution;

(g) The Preliminary Official Statement, as of its date and as of the date hereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(h) At the time of the District's acceptance hereof and (unless the Official Statement is amended or supplemented pursuant to paragraph (i) of Section 2 hereof) at all times subsequent to the date of delivery thereof up to and including the Closing Date, the Official Statement will be true, correct, complete and final in all material respects and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(i) If, after the date of this Contract of Purchase and until 25 days after the end of the "underwriting period" (as defined in Rule 15c2-12), any event shall occur that might cause the Official Statement to contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the District hereby covenants and agrees, to the extent it has knowledge of such event, to notify the Underwriters (and for the purposes of this clause to provide the Underwriters with such information as they may from time to time reasonably request), and, if in the opinion of the Underwriters and their counsel such event requires the preparation and publication of a supplement or amendment to the Official Statement, at its expense to supplement or amend the Official Statement in a form and manner approved by the Underwriters and furnish to the Underwriters a reasonable number of copies of such supplement or amendment. For purposes of this Contract of Purchase, the District may assume that the end of

the “underwriting period” has occurred on the Closing Date unless the District is otherwise notified by the Underwriters on or prior to the Closing Date. If the Underwriters notify the District that the Closing Date is not the end of the “underwriting period”, then the Underwriters shall further notify the District of the date that is the end of the “underwriting period” (as defined in Rule 15c2-12);

(j) If the Official Statement is supplemented or amended pursuant to paragraph (i) of Section 2 of this Contract of Purchase, at the time of each supplement or amendment thereto and (unless subsequently again supplemented or amended pursuant to such paragraph) at all times subsequent thereto during the “underwriting period”, the Official Statement as so supplemented or amended will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which made, not misleading.

(k) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened (i) in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, (ii) affecting or seeking to prohibit, restrain or enjoin the issuance, sale or delivery of any of the [2023 Series D/E] Bonds, the application of the proceeds thereof in accordance with the Subordinate Resolution, or the collection or application of Revenues (as defined in the Subordinate Resolution) or the collection or application of the Net Subordinated Revenues pledged to pay the principal of and interest on the [2023 Series D/E] Bonds under the Subordinate Resolution or in any way contesting or affecting the validity or enforceability of any of the [2023 Series D/E] Bonds, the Subordinate Resolution, the Undertaking, this Contract of Purchase or any action of the District contemplated by any of said documents, (iii) which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, (iv) contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or the powers of the District or its authority with respect to the [2023 Series D/E] Bonds, the adoption of the Subordinate Resolution, or the execution and delivery of the Undertaking or this Contract of Purchase, or any action of the District contemplated by any of said documents, and (v) which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the [2023 Series D/E] Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor;

(l) The District will furnish such information, execute such instruments and take such other action in cooperation with the Underwriters as the Underwriters may reasonably request (i) to qualify the [2023 Series D/E] Bonds for offer and sale under the “Blue Sky” or other securities laws and regulations of such states and other jurisdictions of the United States as the Senior Underwriter may designate, and (ii) to determine the eligibility of the [2023 Series D/E] Bonds for investment under the laws of such states and other jurisdictions and will use its best efforts to continue such qualifications in effect so long as required for the distribution of the [2023 Series D/E] Bonds; provided that in connection therewith the District shall not be required to execute or file a general or special consent to service of process or qualify to do business in

any jurisdiction and will advise the Senior Underwriter promptly of receipt by the District of any written notification with respect to the suspension of the qualification of the [2023 Series D/E] Bonds for sale in any jurisdiction or written notification of the initiation or threat of any proceeding for that purpose;

(m) The audited financial statements of the District for the years ending December 31, 2022 and December 31, 2021 heretofore delivered to the Underwriters and incorporated by reference in the Preliminary Official Statement and the Official Statement as Appendix B fairly present the financial position of the District as of the dates indicated and such financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis;

(n) Between the date hereof and the Closing Date, the District will not, without the prior written consent of the Senior Underwriter, offer or issue any bonds, notes or other obligations for borrowed money, or incur any material liabilities, direct or contingent, nor will there be any adverse change of a material nature in the financial position, results of operations or condition, financial or otherwise, of the District, in either case other than in the ordinary course of its business or as disclosed in the Preliminary Official Statement or the Official Statement or as otherwise disclosed to the Senior Underwriter;

(o) The [2023 Series D/E] Bonds, the Subordinate Resolution and the Undertaking conform to the descriptions thereof contained in the Preliminary Official Statement and the Official Statement;

(p) The District has the legal authority to apply and will apply, or cause to be applied, the proceeds from the sale of the [2023 Series D/E] Bonds as provided in and subject to all of the terms and provisions of the Subordinate Resolution and as described in the Preliminary Official Statement and the Official Statement, including for payment of District expenses incurred in connection with the negotiation, marketing, issuance and delivery of the Bonds to the extent required by Section 7 (Expenses), and will not take or omit to take any action which action or omission will adversely affect the exclusion from gross income for federal income tax purposes of the interest on the [2023 Series D/E] Bonds;

(q) Any certificate signed by any official of the District, and delivered to the Underwriters, shall be deemed a representation and warranty by the District to the Underwriters as to the statements made therein; and

(r) Except as disclosed in the Preliminary Official Statement and the Official Statement, during the last five years the District has complied in all material respects with all previous undertakings required by Rule 15c2-12.

3. Conditions to the Obligations of the Underwriters. The obligations of the Underwriters to accept delivery of and pay for the [2023 Series D/E] Bonds on the Closing Date shall be subject to the performance by the District of its obligations to be performed hereunder at or prior to the Closing Date and to the fulfillment of the following conditions:

(a) The representations, warranties and covenants of the District contained herein shall be true, complete and correct on the date hereof and as of the Closing Date as if made on the Closing Date;

(b) At the Closing Date, the Subordinate Resolution shall have been duly adopted and shall be in full force and effect, and shall not have been repealed, amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters, and there shall have been taken in connection therewith, with the issuance of the [2023 Series D/E] Bonds and with the transactions contemplated thereby and by this Contract of Purchase, all such actions as, in the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel (“Bond Counsel”), shall be necessary and appropriate;

(c) At the Closing Date, the Official Statement shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters;

(d) At or prior to the Closing Date, the Underwriters shall have received copies of the following documents, in each case satisfactory in form and substance to the Underwriters:

(1) The Official Statement executed on behalf of the District by its Chief Executive Officer and General Manager, any Member of its Executive Committee, its Treasurer, its Secretary or its Chief Financial Officer (each an “Authorized Representative”);

(2) The Undertaking executed on behalf of the District by an Authorized Representative;

(3) The [Fifteenth and Sixteenth] Supplemental Resolutions, with only such supplements or amendments thereto as may have been agreed to by the Underwriters and certified by an authorized officer of the District under its seal as having been duly adopted by the District and as being in full force and effect, and the Subordinate Resolution, certified by an authorized officer of the District as being in full force and effect, with such supplements and amendments thereto adopted after the date hereof as may have been agreed to by the Underwriters;

(4) An opinion or opinions relating to the [2023 Series D/E] Bonds, dated the Closing Date and addressed to the District, of Bond Counsel, in substantially the form included in the Official Statement as Appendix F, together with a letter or letters of such Bond Counsel, dated the Closing Date and addressed to the Underwriters, to the effect that the foregoing opinion or opinions addressed to the District may be relied upon by the Underwriters to the same extent as if such opinion or opinions were addressed to them;

(5) An opinion or opinions, dated the Closing Date and addressed to the Senior Underwriter, of Bond Counsel, in substantially the form attached hereto as Exhibit E;

(6) An opinion, dated the Closing Date and addressed to the Senior Underwriter, of General Counsel to the District, in substantially the form attached hereto as Exhibit C;

(7) An opinion, dated the Closing Date and addressed to the Underwriters, of Nixon Peabody LLP, as counsel for the Underwriters (“Underwriters’ Counsel”), to the effect that (i) the [2023 Series D/E] Bonds are exempt from the registration requirements of the Securities Act of 1933, as amended, and the Subordinate Resolution is exempt from qualification under the Trust Indenture Act of 1939, as amended; (ii) the Continuing Disclosure Agreement complies as to form in all material respects with the requirements of paragraph (b)(5) of the Rule applicable to the primary offering of the Bonds; and (iii) based upon the information made available to them in the course of their participation in the preparation of the Preliminary Official Statement and the Official Statement as counsel to the Underwriters and without having undertaken to determine independently, or assuming any responsibility for, the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement, they do not believe that (A) the Preliminary Official Statement, as of its date and as of the date of the Contract of Purchase, and (B) the Official Statement as of its date and as of the Closing Date, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except for the information relating to Cede & Co., DTC or the operation of the book-entry system, the Appendices to the Official Statement, except Appendices [C] and [E], and summaries thereof and references thereto, and other financial, accounting and statistical data included therein, as to all of which no view need be expressed); and (iii) with respect to such matters as the Underwriters may reasonably require;

(8) A certificate, dated the Closing Date, signed by an Authorized Representative of the District in substantially the form attached hereto as Exhibit D (but in lieu of or in conjunction with such certificate the Underwriters may, in its sole discretion, accept certificates or opinions of General Counsel to the District, or of other counsel acceptable to the Underwriters, that in the opinion of such counsel the issues raised in any pending or threatened litigation referred to in such certificate are without substance or that the contentions of all plaintiffs therein are without merit);

(9) [Reserved]

(10) An acceptance of and agreement to the provisions of the [Fifteenth and Sixteenth] Supplemental Resolutions executed by the Trustee under the Subordinate Master Resolution in form and substance acceptable to the Underwriters;

(11) A tax certificate related to the [2023 Series D/E] Bonds in substance and form satisfactory to Bond Counsel;

(12) Ratings of the [2023 Series D/E] Bonds from S&P Global Ratings (“S&P”) of not less than “[AA-]” and from Fitch Ratings, Inc. (“Fitch”) of not less than “[AA];”

(13) [Reserved];

(14) An opinion of counsel to the Trustee, dated the Closing Date, addressed to the Underwriters, to the effect that (i) the Trustee is a national banking association duly organized and validly existing under the laws of the United States of America having full power and being qualified to enter into, accept and agree to the provisions of the Subordinate Resolution and to enter into and perform the Undertaking, (ii) the Undertaking has been duly authorized, executed and delivered by the Trustee and, assuming due authorization, execution and delivery by the other parties thereto, constitutes the valid and binding obligation of the Trustee enforceable in accordance with its terms, subject to laws relating to bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting creditors' rights generally, to the application of equitable principals and to the exercise of judicial discretion in appropriate cases, and to enter into and perform the Undertaking, (iii) all approvals, consents and orders of any governmental authority or agency having jurisdiction in this matter that would constitute a condition precedent to the performance by the Trustee of its duties and obligations under the Subordinate Resolution and the Undertaking have been obtained and are in full force and effect, and (iv) the acceptance of the duties and obligations of the Trustee under the Subordinate Resolution, and the Undertaking and the consummation of the transactions on the part of the Trustee contemplated therein, and the compliance by the Trustee, as applicable, with the terms, conditions and provisions of such document do not contravene any provisions of applicable law or regulation or any order or decree, writ or injunction or the Articles of Association or Bylaws of the Trustee, and, to the best knowledge of such counsel, will not require the consent under or result in a breach of or a default under, any resolution, agreement or other instrument to which the Trustee is a party or by which it may be bound;

(15) A copy of the Blanket Letter of Representations to DTC relating to the [2023 Series D/E] Bonds signed by DTC and the District; and

(16) Such additional legal opinions, certificates, instruments and other documents as the Underwriters may reasonably request to evidence the truth and accuracy and completeness, as of the date hereof and as of the Closing Date, of the District's representations and warranties contained herein and of the statements and information contained in the Preliminary Official Statement or the Official Statement, and the due performance or satisfaction by the District at or prior to the Closing Date of all agreements then to be performed and all conditions then to be satisfied by the District in connection with the transactions contemplated hereby and by the Subordinate Resolution and the Preliminary Official Statement or the Official Statement.

If any of the conditions to the obligations of the Underwriters contained in this Section or elsewhere in this Contract of Purchase with respect to the [2023 Series D/E] Bonds shall not have been satisfied when and as required herein, all obligations of the Underwriters hereunder with respect to the [2023 Series D/E] Bonds may be terminated by the Underwriters at, or at any time prior to, the Closing Date by written notice to the District.

4. **Offering.** The obligations of the District to sell and to deliver the [2023 Series D/E] Bonds on the Closing Date to the Underwriters shall be subject to the following conditions:

(a) The entire \$[PAR] aggregate principal amount of the [2023 Series D/E] Bonds shall be purchased, accepted and paid for by the Underwriters on the Closing Date; and

(b) The District shall receive an Issue Price Certificate of the Senior Underwriter substantially in the form attached hereto as Exhibit F with respect to the Bonds.

5. Issue Price of the [2023 Series D/E] Bonds. The Senior Underwriter, on behalf of the Underwriters, agrees to assist the District in establishing the issue price of the [2023 Series D/E] Bonds and shall execute and deliver to the District at Closing an “issue price” or similar certificate substantially in the form attached hereto as Exhibit F, together with the supporting pricing wires or equivalent communications, with modifications to such certificate as may be deemed appropriate or necessary, in the reasonable judgment of the Senior Underwriter, the District and Bond Counsel, to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the [2023 Series D/E] Bonds.

(b) [Except for the maturities set forth in Schedule A attached hereto,] the District will treat the first price at which 10% of each maturity of the [2023 Series D/E] Bonds (the “10% test”) is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test).

(c) [The Senior Underwriter confirms that the Underwriters have offered the [2023 Series D/E] Bonds to the public on or before the date of this Contract of Purchase at the offering price or prices (the “initial offering price”), or at the corresponding yield or yields, set forth in the final Official Statement. Schedule A sets forth, as of the date of this Contract of Purchase, the maturities, if any, of the [2023 Series D/E] Bonds for which the 10% test has not been satisfied and for which the District and the Senior Underwriter, on behalf of the Underwriters, agree that (i) the Senior Underwriter will retain all unsold [2023 Series D/E] Bonds of each maturity for which the 10% test has not been satisfied and not allocate any such [2023 Series D/E] Bonds to any other Underwriter and (ii) the restrictions set forth in the next sentence shall apply, which will allow the District to treat the initial offering price to the public of each such maturity as of the sale date as the issue price of that maturity (the “hold-the-offering-price rule”). So long as the hold-the-offering-price rule remains applicable to any maturity of the [2023 Series D/E] Bonds, the Senior Underwriter will neither offer nor sell unsold [2023 Series D/E] Bonds of that maturity to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following:

(1) the close of the fifth (5th) business day after the sale date; or

(2) the date on which the Underwriters have sold at least 10% of that maturity of the [2023 Series D/E] Bonds to the public at a price that is no higher than the initial offering price to the public.

The Senior Underwriter shall promptly advise the District or the District’s municipal advisor when the Underwriters have sold 10% of that maturity of the [2023 Series

D/E] Bonds to the public at [a price] that is no higher than the initial offering price to the public, if that occurs prior to the close of the fifth (5th) business day after the sale date.

The District acknowledges that, in making the representation set forth in this subsection, the Senior Underwriter will rely on (i) the agreement of each Underwriter to comply with the hold-the-offering-price rule, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the [2023 Series D/E] Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an Underwriter is a party to a retail distribution agreement that was employed in connection with the initial sale of the [2023 Series D/E] Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, as set forth in the retail distribution agreement and the related pricing wires. The District further acknowledges that each Underwriter shall be solely liable for its failure to comply with its agreement regarding the hold the offering price rule and that no Underwriter shall be liable for the failure of any other Underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a retail distribution agreement to comply with its agreement regarding the hold-the-offering-price rule as applicable to the [2023 Series D/E] Bonds.]

(d) [The Senior Underwriter confirms that:

(1) any agreement among underwriters, any selling group agreement and each retail distribution agreement (to which the Senior Underwriter is a party) relating to the initial sale of the [2023 Series D/E] Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter, each dealer who is a member of the selling group, and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (A)(i) report the prices at which it sells to the public the unsold [2023 Series D/E] Bonds of each maturity allotted to it until it is notified by the Senior Underwriter that either the 10% test has been satisfied as to the [2023 Series D/E] Bonds of that maturity or all [2023 Series D/E] Bonds of that maturity have been sold to the public and (ii) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Senior Underwriter and as set forth in the related pricing wires, (B) promptly notify the Senior Underwriter of any sales of the [2023 Series D/E] Bonds that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the [2023 Series D/E] Bonds to the public (each such term being used as defined below) and (C) acknowledge that, unless otherwise advised by the Underwriter, dealer or broker-dealer, the Senior Underwriter shall assume that each order submitted by the Underwriter, dealer or broker-dealer is a sale to the public; and

(2) any agreement among underwriters relating to the initial sale of the [2023 Series D/E] Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the [2023 Series D/E] Bonds to the public to require each broker-dealer that is a party to such retail distribution agreement to (A) report the prices at which it sells

to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter or the Underwriter that either the 10% test has been satisfied as to the [2023 Series D/E] Bonds of that maturity or all [2023 Series D/E] Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Senior Underwriter or the Underwriter and as set forth in the related pricing wires.

(e) The Underwriters acknowledge that sales of any [2023 Series D/E] Bonds to any person that is a related party to an Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

(1) “public” means any person other than an underwriter or a related party,

(2) “underwriter” means (A) any person that agrees pursuant to a written contract with the District (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the [2023 Series D/E] Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the [2023 Series D/E] Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the [2023 Series D/E] Bonds to the public),

(3) a purchaser of any of the [2023 Series D/E] Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (i) more than 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

(4) “sale date” means the date of execution of this Contract of Purchase by all parties.

6. Termination. The Underwriters shall have the right to terminate their obligations under this Contract of Purchase to purchase, accept delivery of and to pay for the [2023 Series D/E] Bonds, if,

(a) between the date hereof and the Closing Date, the market price or marketability, or the ability of the Underwriters to enforce contracts for the sale, at the initial offering prices set forth in the Official Statement, of the [2023 Series D/E] Bonds have been materially adversely affected, in the judgment of the Underwriters, (evidenced by a written notice to the District terminating the obligation of the Underwriters to accept delivery of and pay for the [2023 Series D/E] Bonds), by reason of any of the following:

(1) (x) any legislation which is (A) enacted by Congress, (B) favorably reported for passage to either House of the Congress of the United States by any Committee of such House to which such legislation has been referred for consideration, or (C) recommended to the Congress for passage by the President of the United States or the Treasury Department, but only, however, if the occurrence of any of the foregoing events is generally accepted by the municipal bond market as potentially affecting the federal tax status of the District, its property or income or the interest on its bonds or notes (including the [2023 Series D/E] Bonds), (y) any decision rendered by a court established under Article III of the Constitution of the United States or the Tax Court of the United States, or (z) a final order, ruling, regulation or official statement issued or made by or on behalf of the Treasury Department of the United States or the Internal Revenue Service with the purpose or effect, directly or indirectly, of imposing federal income taxation upon such interest as would be received by the holders of the [2023 Series D/E] Bonds, or upon such revenues or other income of the general character expected to be received by the District, provided, however, that the enactment of legislation which only diminishes the value of, as opposed to eliminating the exclusion from gross income for federal income tax purposes will not give the Underwriters the right to terminate their obligations hereunder.

(2) Legislation enacted (or resolution passed) by the Congress or a final order, ruling, regulation or official statement is issued or made by or on behalf of the Securities and Exchange Commission, or any other governmental agency having jurisdiction of the subject matter, to the effect that obligations of the general character of the [2023 Series D/E] Bonds are not exempt from registration under or other requirements of the Securities Act of 1933, as amended, or are not exempt from qualification under, or other requirements of, the Trust Indenture Act of 1939, as amended, or that the issuance, offering or sale of the [2023 Series D/E] Bonds or obligations of the general character of the [2023 Series D/E] Bonds, including any or all underlying arrangements, as contemplated hereby or by the Preliminary Official Statement or the Official Statement, otherwise is or would be in violation of the federal securities laws as amended and then in effect;

(3) Any new material outbreak or escalation of hostilities having a material effect on the financial markets of the United States or the declaration by the United States of a national emergency or war or the occurrence of any other local, national or international calamity, crisis or event relating to the effective operation of the government of or the financial community in the United States, including, without limitation, a downgrade of the sovereign debt rating of the United States or an escalation thereof by any major credit rating agency or payment default on United States Treasury obligations;

(4) the declaration of a general banking moratorium by federal, New York or California authorities, or the general suspension of trading on the New York Stock Exchange or any other national securities exchange, or any material disruption in commercial banking or securities settlement, payment services, or clearing services;

(5) the imposition by the New York Stock Exchange or other national securities exchange, or any governmental authority, of any material restrictions not now in force with respect to the [2023 Series D/E] Bonds or obligations of the general character of the [2023 Series D/E] Bonds or securities generally, or the material increase of any such restrictions now in force, including those relating to the net capital requirements of, the Underwriters;

(6) the adoption of any amendment to the federal or California Constitution, decision by any federal or California court, or enactment by any federal or California legislative body materially adversely affecting (i) the District or the right of the District to receive or to pledge any of the Net Subordinated Revenues, or (ii) the validity or enforceability of this Contract of Purchase, the [2023 Series D/E] Bonds or the Subordinate Resolution;

(7) the adoption of any amendment to the California Constitution, decision by any California court, or enactment by any California legislative body adversely affecting the exemption of state or local income tax upon such interest as would be received by the holders of the [2023 Series D/E] Bonds, or

(8) (i) a downgrading or suspension of any rating (without regard to credit enhancement) by Moody's, S&P, or Fitch of any debt securities issued by the District, or (ii) there shall have been any official statement as to a possible downgrading (such as being placed on "credit watch" or "negative outlook" or any similar qualification) of any rating by Moody's, S&P or Fitch of any debt securities issued by the District, including the [2023 Series D/E] Bonds.

(b) an event occurs, or information becomes known, which, in the judgment of the Underwriters, makes untrue in any material respect any statement or information contained in the Official Statement, or has the effect that the Official Statement contains any untrue statement of material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

7. Expenses. (a) Except as set forth in paragraph (b) of this Section, the Underwriters shall be under no obligation to pay, and the District shall pay, or cause to be paid, all expenses incident to the performance of the District's obligations hereunder including, but not limited to, the cost of word processing and reproducing, executing and delivering the [2023 Series D/E] Bonds to the Underwriters; the cost of preparation, printing (and/or word processing and reproducing), distribution and delivery of the Subordinate Resolution; the cost of printing and distributing copies of the Preliminary Official Statement and the Official Statement in sufficient quantities for distribution in connection with the sale of the [2023 Series D/E] Bonds (including resales in the secondary market); the fees and disbursements of Bond Counsel; the fees and disbursements of Public Financial Management, Inc. for its services as Financial Advisor to the District; the fees and disbursements of any other engineers, accountants, and any other experts or consultants retained in connection with the issuance of the [2023 Series D/E] Bonds; the fees and disbursements of the Trustee; fees charged by the rating agencies for rating the [2023 Series D/E] Bonds; any advertising expenses; filing fees; CUSIP charges; or fees and

expenses of any credit enhancement; expenses incurred by the Underwriters on behalf of the District relating to food, transportation or lodging for District staff members attending the bond pricing are to be reimbursed by the District through proceeds of the [2023 Series D/E] Bonds or available funds of the District (the District's obligations in regard to these expenses survive if delivery of the [2023 Series D/E] Bonds fails due to one of the conditions set forth in Section 3 hereof or this Contract of Purchase is terminated pursuant to Section 6 hereof) and any other expenses not specifically enumerated in paragraph (b) of this Section incurred in connection with the issuance of the [2023 Series D/E] Bonds.

(b) The District shall be under no obligation to pay, and the Underwriters shall pay (from the expense component of the underwriting discount), the cost of preparation of the Agreement Among Underwriters and the letter of instructions relating thereto and this Contract of Purchase; the cost of wiring funds for the payment of the purchase price of the [2023 Series D/E] Bonds; the fees and expenses of DTC incurred with respect to depositing the [2023 Series D/E] Bonds therewith; expenses to qualify the [2023 Series D/E] Bonds for sale under any "Blue Sky" laws; fees to the California Debt and Investment Advisory Commission; and all other expenses incurred by the Underwriters in connection with its public offering and distribution of the [2023 Series D/E] Bonds not specifically enumerated in paragraph (a) of this Section, including the fees and disbursements of Underwriters' Counsel [and fees of Lumesis for a continuing disclosure undertaking compliance review]. Notwithstanding that the fees to the California Debt and Investment Advisory Commission are solely the legal obligation of the Underwriters, the District agrees to reimburse the Underwriters for such fees.

8. **Notices.** Any notice or other communication to be given to the District under this Contract of Purchase may be given by delivering the same in writing to Sacramento Municipal Utility District, at 6201 S Street, Sacramento, California 95817-1899; and any notice or other communication to be given to the Underwriters under this Contract of Purchase may be given by delivering the same in writing to BofA Securities, Inc., 315 Montgomery St, 1st Floor, San Francisco, CA 94104, Attention: [Bradford M. Walker].

9. **Parties in Interest.** This Contract of Purchase is made solely for the benefit of the District and the Underwriters (including successors or assigns of any Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof. The term "successors and assigns" as used in this Section shall not include any purchaser of the [2023 Series D/E] Bonds, as such purchaser, from any of the several Underwriters.

10. **Survival of Representations and Warranties.** The representations and warranties of the District, set forth in or made pursuant to this Contract of Purchase, shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the closing or termination of this Contract of Purchase and regardless of any investigations or statements as to the results thereof made by or on behalf of the Underwriters and regardless of delivery of and payment for the [2023 Series D/E] Bonds.

11. **Counterparts.** This Contract of Purchase may be executed in several counterparts, which together shall constitute one and the same instrument.

12. California Law Governs; Venue. The validity, interpretation and performance of this Contract of Purchase shall be governed by the laws of the State of California. Any action or proceeding to enforce or interpret this Contract of Purchase shall be brought, commenced or prosecuted in the County of Sacramento, California.

13. Entire Agreement. This Contract of Purchase when accepted by you in writing as heretofore specified shall constitute the entire agreement between us.

[remainder of page intentionally left blank]

14. **Effectiveness.** This Contract of Purchase shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by an authorized officer of the District and shall be valid and enforceable as of the time of such acceptance.

Very truly yours,

BOFA SECURITIES, INC., [UNDERWRITING
GROUP TO COME]

BY: BOFA SECURITIES, INC., as Senior
Underwriter

[Bradford M. Walker]
[Director]

Accepted: [SALE DATE]

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Russell Mills
Treasurer

[Signature page to Series [2023D/E] Bonds Contract of Purchase]

Exhibit A

SACRAMENTO MUNICIPAL UTILITY DISTRICT

[\$[SERIES D PAR] Subordinated Electric Revenue Bonds, [2023 Series D]

<u>Maturity</u> <u>(August 15)</u>	<u>Principal</u> <u>Amount</u>	<u>End of Initial</u> <u>Term Rate Period</u>	<u>Mandatory</u> <u>Tender Date</u>	<u>Initial</u> <u>Term Rate</u>	<u>Yield</u>	<u>Price</u>
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[\$[SERIES E PAR] Subordinated Electric Revenue Bonds, [2023 Series E]

<u>Maturity</u> <u>(August 15)</u>	<u>Principal</u> <u>Amount</u>	<u>End of Initial</u> <u>Term Rate Period</u>	<u>Mandatory</u> <u>Tender Date</u>	<u>Initial</u> <u>Term Rate</u>	<u>Yield</u>	<u>Price</u>
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SACRAMENTO MUNICIPAL UTILITY DISTRICT

**Exhibit B to the Contract of Purchase
(Official Statement)**

SACRAMENTO MUNICIPAL UTILITY DISTRICT

**Exhibit C to the Contract of Purchase
(Opinion of General Counsel to the
Sacramento Municipal Utility District)**

[CLOSING DATE]

BofA Securities, Inc.
315 Montgomery St, 1st Floor,
San Francisco, CA 94104

Re: Sacramento Municipal Utility District
\$[SERIES D PAR] Subordinated Electric Revenue Bonds, [2023 Series
D], and \$[SERIES E PAR] Subordinated Electric Revenue Bonds, [2023
Series E]

Ladies and Gentlemen:

This opinion is being delivered pursuant to Paragraph 3(d)(6) of the Contract of Purchase (the “Contract of Purchase”), dated [SALE DATE] between BofA Securities, Inc., as Senior Managing Underwriter named therein (the “Senior Underwriter”), and the Sacramento Municipal Utility District (the “District”) relating to the above-captioned bonds (together, the “[2023 Series D/E] Bonds”).

As counsel to the District, I have reviewed (i) Resolution No. 85-11-1 of the District, adopted on November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001, as amended and supplemented to date, including as amended and supplemented by Resolutions Nos. [RESO NOs.] respectively, adopted on [May 18, 2023] (as so amended and supplemented, the “Subordinate Resolution”); (ii) the Continuing Disclosure Agreement, dated the date hereof (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association, as trustee (in such capacity, the “Trustee”); (iii) the Preliminary Official Statement of the District, dated [POS DATE] (the “Preliminary Official Statement”); (iv) the Official Statement of the District, dated [SALE DATE] (the “Official Statement”) and (v) such other documents, opinions and matters to the extent I deemed necessary to provide the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. I have assumed the genuineness of all documents and signatures presented to me (whether as originals or as copies) and the due and legal execution and delivery by, and validity against, any parties other than the District. I have not undertaken to verify independently, and have assumed, the accuracy of the factual matters represented, warranted or certified in the documents referred to in the second paragraph hereof. I have further assumed compliance with all covenants and agreements contained in such documents.

I call attention to the fact that the rights and obligations under the Subordinate Resolution, the Undertaking and the Contract of Purchase may be subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, and to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. I express no opinion with respect to any indemnification, contribution, choice of law, choice of forum or waiver provisions contained therein.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, I am of the opinion that:

1. The District is a political subdivision of the State of California duly organized and validly existing under the Act, as amended, and has full legal right, power and authority to execute and deliver (or adopt, as the case may be), and to perform its obligations under, the Subordinate Resolution, the Undertaking and the Contract of Purchase.

2. The Contract of Purchase and the Undertaking have been duly authorized, executed and delivered by the District, and, assuming due authorization, execution and delivery by each of the parties thereto other than the District, constitute the legal, valid and binding obligations of the District, enforceable against the District in accordance with their respective terms.

3. The District is not in breach of or default under any existing constitutional provision, applicable law or administrative regulation of the State of California or the United States or any applicable judgment or decree or any loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject which would have a material adverse effect on the financial condition or operations of the District, and no event has occurred and is continuing which with the passage of time or the giving of notice, or both, would constitute a default or event of default under any such instrument which would have a material adverse effect on the financial condition or operations of the District; and the execution and delivery of the [2023 Series D/E] Bonds, the Undertaking and the Contract of Purchase and the adoption of the Subordinate Resolution, and compliance with any existing constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject will not, as of the date hereof, conflict with or constitute a breach of or default under any such instrument which would have a material adverse effect on the financial condition or operations of the District, nor will any such execution, delivery, adoption or compliance result in the creation or imposition of any lien, charge or other security interest or encumbrance of any nature whatsoever upon any of the property or assets of the District or under the terms of any such law, regulation or instrument, except as expressly provided by the [2023 Series D/E] Bonds and the Subordinate Resolution.

4. The statements contained in the Preliminary Official Statement and the Official Statement which purport to describe certain provisions of the Bonds, Undertaking and the

Subordinate Resolution present a fair and accurate summary of such provisions for the purpose of use in the Official Statement.

5. Except as described or referred to in the Preliminary Official Statement and the Official Statement, as of the date hereof, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body, pending or, to the best of my knowledge, threatened against the District affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the [2023 Series D/E] Bonds or the collection of the Revenues (as defined in the Subordinate Resolution) or the Net Subordinated Revenues (as defined in the Subordinate Resolution) pledged or to be pledged to pay the principal of and interest on the [2023 Series D/E] Bonds or contesting or affecting as to the District the validity or enforceability of the Act, the [2023 Series D/E] Bonds, the Subordinate Resolution, the Contract of Purchase or the Undertaking, or contesting the tax exempt status of interest on the [2023 Series D/E] Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the [2023 Series D/E] Bonds, the adoption of the Subordinate Resolution, or the execution and delivery by the District of the Contract of Purchase or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act or the authorization, execution, delivery or performance by the District of the [2023 Series D/E] Bonds, the Subordinate Resolution, the Undertaking or the Contract of Purchase.

6. Based upon my review of the Preliminary Official Statement and the Official Statement as General Counsel to the District and without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement (except as specifically set forth in paragraph 4 hereof), I have no reason to believe that the statements contained in the Preliminary Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Preliminary Official Statement, and other financial and statistical data included therein, as to all of which I express no view) as of its date and as of the date of the Contract of Purchase contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and the Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Official Statement, and other financial and statistical data included therein, as to all of which I express no view) (A) as of the date of the Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading or (B) as of the date hereof contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

For purposes of the opinions expressed herein, I have assumed that an agreement or other document is “material” to the District if it involves amounts in excess of \$10,000,000 and that a matter would result in a “material adverse change” to the District if the financial consequences involved would exceed \$10,000,000.

I understand that you are relying upon the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, with respect to the validity of the [2023 Series D/E] Bonds and the exclusion of interest on the [2023 Series D/E] Bonds from gross income for federal income tax purposes and the [2023 Series D/E] Bonds for purposes of State of California income taxation and, accordingly, render no opinion with respect thereto.

Very truly yours,

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Exhibit D to the Contract of Purchase

CERTIFICATE

The Sacramento Municipal Utility District (the “District”), hereby certifies that:

(1) The representations and warranties of the District (excluding those representations and warranties contained in Section 2(e) and Section 2(k) of the hereinafter defined Contract of Purchase) contained in the Contract of Purchase, dated [SALE DATE], between the District and the Underwriters named therein (the “Contract of Purchase”) with respect to the sale by the District of \$[SERIES D PAR] principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds, 2023 Series D (the “[2023 Series D] Bonds”), and the \$[SERIES E PAR] principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds, 2023 Series E (the “[2023 Series E] Bonds”) and, together with the [2023 Series D Bonds, and the 2023 Series E Bonds], the “[2023 Series D/E] Bonds”), are true and correct on and as of the Closing Date as if made on the Closing Date.

(2) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the [2023 Series D/E] Bonds under the Subordinate Resolution, the Undertaking and the Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the [2023 Series D/E] Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, the Contract of Purchase, the Undertaking, the [2023 Series D/E] Bonds or the Subordinate Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained.

(3) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the best of knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened against the District, in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to

prohibit, restrain or enjoin the sale, issuance or delivery of any of the [2023 Series D/E] Bonds or the collection of the Revenues (as defined in the Subordinate Resolution) or the Net Subordinated Revenues (as defined in the Subordinate Resolution) pledged or to be pledged to pay the principal of and interest on the [2023 Series D/E] Bonds, or in any way contesting or affecting as to the District the validity or enforceability of the Act, the [2023 Series D/E] Bonds, the Subordinate Resolution, the Contract of Purchase, the Undertaking, or any action of the District contemplated by any of said documents, or contesting the tax exempt status of interest on the [2023 Series D/E] Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution system, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the [2023 Series D/E] Bonds, the adoption of the Subordinate Resolution, or the execution and delivery by the District of the Contract of Purchase or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act of the authorization, execution, delivery or performance by the District of the [2023 Series D/E] Bonds, the Subordinate Resolution, the Undertaking, or the Contract of Purchase, or any action of the District contemplated by any of said documents, or which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the [2023 Series D/E] Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor.

(4) No event affecting the District has occurred (with respect to the Preliminary Official Statement, from its date to the date of the Contract of Purchase, and with respect to the Official Statement, since the date of the Official Statement) which should have been or should be disclosed in the Preliminary Official Statement or the Official Statement so that the Preliminary Official Statement or the Official Statement did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and which has not been disclosed in a supplement or amendment to the Preliminary Official Statement or the Official Statement.

(5) The District has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the date hereof pursuant to the Contract of Purchase with respect to the issuance of the [2023 Series D/E] Bonds.

(6) All capitalized terms employed herein which are not otherwise defined shall have the same meanings as in the Contract of Purchase.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Name:
Title:

Dated: [CLOSING DATE]

**Exhibit E to the Contract of Purchase
(Supplemental Opinion of Bond Counsel)**

[Under Review]

[CLOSING DATE]

BofA Securities, Inc.
315 Montgomery St, 1st Floor,
San Francisco, CA 94104

Re: Sacramento Municipal Utility District Subordinated Electric Revenue Bonds,
[2023 Series D] and [2023 Series E]

(Supplemental Opinion)

Ladies and Gentlemen:

This letter is addressed to you, as Senior Underwriter, pursuant to Section 3(d)(5) of the Contract of Purchase, dated [SALE DATE] (the “Purchase Contract”), between you and the other underwriters named therein and the Sacramento Municipal Utility District (“SMUD”), providing for the purchase of \$[TOTAL PAR] principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds, [2023 Series D and 2023 Series E] (collectively, the “2023 Subordinated Bonds”). The 2023 Subordinated Bonds are being issued pursuant to Resolution No. 85-11-1 of the Board of Directors of SMUD, adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted June 21, 2001, as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. [RESO NO.], adopted [May 18, 2023] (the “Fifteenth Supplemental Resolution”) and Resolution No. [RESO NO.], adopted [May 18, 2023] (the “Sixteenth Supplemental Resolution”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution or, if not defined in the Resolution, in the Purchase Contract.

In connection with our role as Bond Counsel to SMUD, we have reviewed the Purchase Contract; the Resolution; the Subordinate Master Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; certain portions of the preliminary official statement of SMUD, dated [POS DATE], with respect to the 2023 Subordinated Bonds (the “Preliminary Official Statement”) and of the official statement of SMUD, dated [SALE DATE], with respect to the 2023 Subordinated Bonds (the “Official Statement”); opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to provide the opinions and conclusions set forth herein.

The opinions and conclusions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such

authorities. Such opinions or conclusions may be affected by actions taken or omitted or events occurring after the original delivery of the 2023 Subordinated Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the original delivery of the 2023 Subordinated Bonds on date hereof. We have assumed the genuineness of all documents and signatures provided to us (whether as originals or as copies) and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. We have further assumed compliance with all covenants and agreements contained in such documents. In addition, we call attention to the fact that the rights and obligations under the 2023 Subordinated Bonds, the Resolution, the Tax Certificate and the Purchase Contract and their enforceability may be subject to bankruptcy, insolvency, reorganization, receivership, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinions with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions and conclusions:

1. The 2023 Subordinated Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Resolution is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended.

2. The Purchase Contract has been duly executed and delivered by, and constitutes a valid and binding obligation of, SMUD.

3. The statements contained in the Preliminary Official Statement and the Official Statement under the captions "THE 2023 SUBORDINATED BONDS" (except information relating to book-entry or The Depository Trust Company), "SECURITY FOR THE SUBORDINATED BONDS" and "TAX MATTERS" and in APPENDIX D – "SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION," and APPENDIX E – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION" excluding any material that may be treated as included under such captions by cross-reference or reference to other documents or sources, insofar as such statements expressly summarize certain provisions of the Resolution, the Subordinate Master Resolution, the Senior Bond Resolution and the form and content of our final legal opinion as Bond Counsel to SMUD concerning the validity of the 2023 Subordinated Bonds and certain other matters, dated the date hereof and addressed to SMUD, are accurate in all material respects.

4. We are not passing upon and do not assume any responsibility for the accuracy (except as explicitly stated in paragraph 3 above), completeness or fairness of any of the statements contained in the Preliminary Official Statement or in the Official Statement and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. We do not assume any responsibility for any electronic version of the Preliminary Official Statement or the Official Statement, and assume that any such version is identical in all respects to the printed version. In our capacity as Bond Counsel to SMUD in connection with issuance of the 2023 Subordinated Bonds, we participated in conferences with your representatives, your counsel, representatives of SMUD, its counsel, accountants, and others, during which the contents of the Preliminary Official Statement or the Official Statement and related matters were discussed. Based on our participation in the above-mentioned conferences (which did not extend beyond the date of the Official Statement), and in reliance thereon, on oral and written statements and representations of SMUD and others and on the records, documents, certificates, opinions and matters herein mentioned, subject to the limitations on our role as Bond Counsel to SMUD, we advise you as a matter of fact and not opinion that (a) as of [SALE DATE], no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Preliminary Official Statement which caused us to believe as of that date that the Preliminary Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and (b) as of the date of the Official Statement and as of the date hereof, no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Official Statement which caused us to believe as of the date of the Official Statement and as of the date hereof that the Official Statement contained or contains any untrue statement of a material fact or omitted or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, we expressly exclude from the scope of this paragraph and express no view or opinion about (i) any difference in information contained in the Preliminary Official Statement compared to what is contained in the Official Statement, whether or not related to pricing or sale of the 2023 Subordinated Bonds, and whether any such difference is material and should have been included in the Preliminary Official Statement, and (ii) with respect to both the Preliminary Official Statement and the Official Statement, any CUSIP numbers, financial, accounting, statistical or economic, engineering or demographic data or forecasts, numbers, charts, tables, graphs, estimates, projections, assumptions or expressions of opinion, any statements about compliance with prior continuing disclosure undertakings, any information about Cede & Co., The Depository Trust Company or book-entry, ratings, rating agencies, underwriters, underwriting and the information contained in Appendices B and C included or referred to therein or omitted therefrom. No responsibility is undertaken or view expressed with respect to any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement or the Official Statement.

This letter is furnished by us as Bond Counsel to SMUD. No attorney-client relationship has existed or exists between our firm and you in connection with the 2023 Subordinated Bonds or by virtue of this letter. We disclaim any obligation to update this letter. This letter is delivered to you as Senior Underwriter of the 2023 Subordinated Bonds, is solely for your

benefit as such Senior Underwriter in connection with the original delivery of the 2023 Subordinated Bonds on the date hereof, and is not to be used, circulated, quoted or otherwise referred to or relied upon for any other purpose or by any other person. This letter is not intended to, and may not, be relied upon by owners of 2023 Subordinated Bonds or by any other party to whom it is not specifically addressed.

Very truly yours,

Exhibit F to the Contract of Purchase

(Form of Issue Price Certificate Of The Senior Underwriter Regarding Offering Prices)

Sacramento Municipal Utility District Subordinated Electric Revenue Bonds,
[2023 Series D] and [2023 Series E]

The undersigned, on behalf of BofA Securities, Inc., as representative (the “Representative”) of itself [UNDERWRITING GROUP TO COME] (together, the “Underwriting Group”), hereby certifies, on its own behalf and on behalf of the other members of the Underwriting Group on the basis of representations and warranties set forth in the agreement among underwriters, as set forth below with respect to the sale and issuance of the above-captioned obligations (the “Bonds”).

1. ***Sale of the [General Rule Maturities][Bonds].*** As of the date of this Certificate, for each Maturity of the [General Rule Maturities][Bonds], the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A.

2. ***[Initial Offering Price of the Hold-the-Offering-Price-Maturities.***

(a) The Underwriting Group offered the Hold-the-Offering-Price Maturities to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Bonds is attached to this Certificate as Schedule B.

(b) As set forth in the Bond Purchase Agreement for the Bonds, the Representative has agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the unsold Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) unsold Bonds of the Hold-the-Offering-Price Maturities shall be retained by the Representative and not allocated to any of the other Underwriters. Pursuant to such agreement, the Representative has not offered or sold any unsold Bonds of any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.]

3. ***Defined Terms.***

(a) [*General Rule Maturities* means those Maturities of the Bonds listed in Schedule A hereto as the “General Rule Maturities.”]

(b) [*Hold-the-Offering-Price Maturities* means those Maturities of the Bonds listed in Schedule A hereto as the “Hold-the-Offering-Price Maturities.”]

(c) [*Holding Period* means, with respect to a Hold-the-Offering-Price Maturity, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date, or (ii) the date on which the Underwriters have sold at least 10% of such Hold-the-Offering-Price Maturity to the Public at prices that are no higher than the Initial Offering Price for such Hold-the-Offering-Price Maturity.]

(d) *Issuer* means Sacramento Municipal Utility District.

(e) *Maturity* means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(f) *Public* means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a Related Party (as such terms are defined below) to an Underwriter.

(g) A purchaser of any of the Bonds is a *Related Party* to any Underwriter if the Underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other).

(h) *Sale Date* means the first day on which there is a binding contract in writing for the sale of a Maturity of the Bonds. The Sale Date of the Bonds is [SALE DATE].

(i) *Underwriter* means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The representations set forth in this certificate are limited to factual matters only, and as it relates to the actions of the other Underwriters, such representations are made to the best of the Representative's knowledge based on the Representative's records. Nothing in this certificate represents the Representative's interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Issuer, in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds.

Dated: [CLOSING DATE]

BofA Securities, Inc., as representative of the Underwriting Group

By: _____
Name: _____

Schedule A

Sale Prices

[\$[SERIES D PAR] Subordinated Electric Revenue Bonds, [2023 Series D]

<u>Maturity (August 15)</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>Price</u>	<u>Hold-the-Price Maturities</u>	<u>General Rule Maturities</u>
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[\$[SERIES E PAR] Subordinated Electric Revenue Bonds, [2023 Series E]

<u>Maturity (August 15)</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>Price</u>	<u>Hold-the-Price Maturities</u>	<u>General Rule Maturities</u>
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Schedule B

Pricing Wire or Equivalent Communication

Not applicable, because there are no Hold-the-Offering-Price Maturities

Attached

SACRAMENTO MUNICIPAL UTILITY DISTRICT

[\$[PAR] Subordinated Electric Revenue Refunding Bonds, [2023 Series A]

CONTRACT OF PURCHASE

[SALE DATE]

Honorable Board of Directors
Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899

Dear Directors:

The undersigned Barclays Capital Inc., and [UNDERWRITING GROUP TO COME] (herein collectively referred to as the “Underwriters”), acting for and on behalf of themselves, offer to enter into this Contract of Purchase (the “Contract of Purchase”) with the Sacramento Municipal Utility District (the “District”) which, upon the District’s acceptance, will be binding upon the District and upon the Underwriters. Barclays Capital Inc., has been duly authorized to execute this Contract of Purchase and to act hereunder by and based on representations made to it under an Agreement Among Underwriters dated _____, 2023 on behalf of the Underwriters as the Senior Managing Underwriter (the “Senior Underwriter”). This offer is made subject to the District’s acceptance on or before 5:00 p.m., Sacramento time, on the date hereof, and if not so accepted, will be subject to withdrawal by the Underwriters upon notice delivered to the District at any time prior to the acceptance hereof by the District.

1. Purchase, Sale and Delivery of the Bonds. Subject to the terms and conditions and in reliance upon the representations, warranties and agreements herein set forth, the Underwriters, jointly and severally, hereby agree to purchase from the District, and the District hereby agrees to sell to the Underwriters, all (but not less than all) of the [\$[PAR] aggregate principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, [2023 Series A] (the “Bonds”) dated [CLOSING DATE], bearing interest payable as set forth in the Official Statement (as hereinafter defined) of the District relating to the Bonds in each year until maturity or earlier redemption at the initial rate and maturing on the dates and in the amounts set forth in the Official Statement. The purchase price for the Bonds shall be [\$[PURCHASE PRICE] (consisting of the principal amount of the Bonds of [\$[PAR] plus [net] original issue premium of [\$[OIP]) and minus an Underwriter’s discount of [\$[UWD].

(b) The Bonds shall be substantially in the form described in, shall be issued and secured under the provisions of, and shall be payable as provided in, Resolution No. 85-11-1, adopted by the Board of Directors of the District on November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001 (the “Subordinate Master Resolution”), as heretofore amended and supplemented, including the amendments and supplements thereto made by Resolution No. [RESO NO.], adopted by the Board of Directors on [May 18, 2023] (the “[Sixteenth] Supplemental Resolution”). The Subordinate Master Resolution, as supplemented and amended as described in this Contract of Purchase, is herein called the “Subordinate Resolution.” The Bonds are authorized to be issued pursuant to applicable California law, including the Municipal Utility District Act (Sections 12850 to 12860 of the Public Utilities Code), the Revenue Bond Law of 1941 (Government Code Section 54300 *et seq.*), Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (Section 53580 *et seq.*) and the Subordinate Resolution. The Bonds will be special obligations of the District payable exclusively from, and are secured by a pledge (effected in the manner and to the extent provided in the Subordinate Resolution) of, the Net Subordinated Revenues (as defined in the Subordinate Resolution). The Bonds shall be payable and shall be subject to redemption as provided in the Subordinate Resolution.

(c) [The Bonds are being issued to (i) refund the Refunded Bonds (as defined in the Official Statement), and (ii) pay certain costs associated with the issuance of the Bonds.] [A portion of the proceeds of the Bonds, together with other available funds, will be deposited in an escrow fund established pursuant to an escrow agreement (the “Escrow Agreement”) between the District and the Trustee, in its capacity as Escrow Agent (in such capacity, the “Escrow Agent”).]

(d) The District has heretofore delivered to the Underwriters copies of the Preliminary Official Statement dated [POS DATE], relating to the Bonds (the “Preliminary Official Statement”) in connection with the public offering of the Bonds. The Preliminary Official Statement was deemed final by the District as of the date thereof in accordance with paragraph (b)(1) of Rule 15c2-12 of the Securities and Exchange Commission (“Rule 15c2-12”), except for the information not required to be included therein under Rule 15c2-12.

(e) The District shall prepare and deliver to the Underwriters, as promptly as practicable, but in any event not later than two business days prior to the Closing Date (as defined below) or seven business days from the date hereof, a final official statement, with such changes and amendments as may be agreed to by the Underwriters, in such quantities as the Underwriters may reasonably request in order to comply with paragraph (b)(4) of Rule 15c2-12 and the rules of the Municipal Securities Rulemaking Board (“MSRB”) (such official statement, including the cover page and Appendices thereto, as the same may be supplemented or amended pursuant to paragraph (i) of Section 2 hereof, is herein referred to as the “Official Statement”). In addition, the District will provide, subject to customary disclaimers regarding the transmission of electronic copies, an electronic copy of the final Official Statement to the Underwriters in the currently required designated electronic format stated in MSRB Rule G-32 and the EMMA Dataport Manual (as defined below). The parties agree that the format in which the Preliminary Official Statement was delivered meets such electronic format requirements.

(f) Within one (1) business day after receipt of the Official Statement from the District, but by no later than the Closing Date, the Underwriters shall, at their own expense submit

the Official Statement to EMMA (as defined below). The Underwriters will comply with the provisions of MSRB Rule G-32, including without limitation the submission of Form G-32 and the Official Statement and notify the District of the date on which the Official Statement has been filed with EMMA.

“EMMA” means the MSRB’s Electronic Municipal Market Access system, or any other electronic municipal securities information access system designated by the MSRB for collecting and disseminating primary offering documents and information.

“EMMA Dataport Manual” means the document(s) designated as such published by the MSRB from time to time setting forth the processes and procedures with respect to submissions to be made to the primary market disclosure service of EMMA by underwriters under Rule G-32(b).

(g) The District hereby ratifies, confirms and approves the use and distribution by the Underwriters prior to the date hereof of the Preliminary Official Statement and hereby authorizes the Underwriters to use and distribute the Official Statement, the Subordinate Resolution and this Contract of Purchase, and all information contained in each, and all other documents, certificates and statements furnished by the District to the Underwriters in connection with the transactions contemplated by this Contract of Purchase, in connection with the offer and sale of the Bonds.

The District will covenant pursuant to a Continuing Disclosure Agreement dated as of the date of the issuance of the Bonds (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association (the “Trustee”), to provide annual reports and certain notices as described in Appendix [G] of the Official Statement.

(h) The District agrees and acknowledges that: (i) the Underwriters are not acting as municipal advisors within the meaning of Section 15B of the Securities Exchange Act, as amended, (ii) the primary role of the Underwriters, as underwriters, is to purchase securities, for resale to investors, in an arm’s length commercial transaction between the District and the Underwriters and the Underwriters have financial and other interests that differ from those of the District; (iii) the Underwriters are acting solely as principals and are not acting as municipal advisors, financial advisors or fiduciaries to the District and have not assumed any advisory or fiduciary responsibility to the District with respect to the transaction contemplated hereby and the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriters have provided other services or are currently providing other services to the District on other matters); (iv) the only contractual obligations the Underwriters have to the District with respect to the transaction contemplated hereby expressly are set forth in this Contract of Purchase; and (v) the District has consulted its own financial and/or municipal, legal, accounting, tax and other advisors, as applicable, to the extent it has deemed appropriate.

(i) At 8:00 A.M., Sacramento time, on [CLOSING DATE] or at such earlier or later time or date as shall be agreed upon by the Underwriters and the District (such time and date being herein referred to as the “Closing Date”), the District will deliver the Bonds to The Depository Trust Company, New York, New York (“DTC”), for the account of the Underwriters, duly executed by the District, and the other documents herein mentioned; and the Underwriters will (i) accept such delivery and pay the purchase price of the Bonds as set forth in paragraph (a)

of this Section by wire transfer in San Francisco, California to the order of the District. Delivery of the documents herein mentioned shall be made at the offices of Orrick, Herrington & Sutcliffe LLP, 400 Capitol Mall, Suite 3000, Sacramento, California 95814, or such other place as shall have been mutually agreed upon by the District and the Underwriters, except that the Bonds shall be delivered at the offices of DTC in New York, New York or at such other place and in such manner as shall have been mutually agreed upon by the District and the Underwriters.

The Bonds shall be issued initially in fully registered book-entry eligible form (which may be typewritten) in the form of a single registered bond for each maturity of the Bonds, shall bear CUSIP numbers and shall be registered in the name of Cede & Co., as nominee of DTC.

2. Representations, Warranties and Agreements of the District. The District hereby represents, warrants to and agrees with the Underwriters that:

(a) The District is a political subdivision of the State of California duly organized and validly existing pursuant to the Municipal Utility District Act as contained in Public Utilities Code Section 11501 *et seq.* (the "Act") and has, and at the Closing Date will have, full legal right, power and authority (i) to enter into this Contract of Purchase, [the Escrow Agreement,] and the Undertaking, (ii) to adopt the Subordinate Resolution, (iii) to pledge the Net Subordinated Revenues as set forth in the Subordinate Resolution, (iv) to issue, sell and deliver the Bonds to the Underwriters pursuant to the Subordinate Resolution as provided herein, (v) to acquire, construct, operate, maintain, improve and finance and refinance its Electric System (as defined in the Subordinate Resolution) and conduct the business thereof as set forth in and contemplated by the Preliminary Official Statement and the Official Statement, and (vi) to carry out, give effect to and consummate the transactions contemplated by this Contract of Purchase, [the Escrow Agreement,] the Undertaking, the Subordinate Resolution and the Preliminary Official Statement and the Official Statement;

(b) The District has complied, and will at the Closing Date be in compliance, in all material respects, with the Act, the Subordinate Resolution, and with the obligations in connection with the issuance of the Bonds on its part contained in the Subordinate Resolution, the Bonds, the Act, [the Escrow Agreement,] the Undertaking and this Contract of Purchase;

(c) The District has duly and validly adopted the Subordinate Resolution, has duly authorized and approved the execution and delivery of the Bonds, this Contract of Purchase, [the Escrow Agreement,] the Undertaking and the Official Statement and has duly authorized and approved the performance by the District of its obligations contained in, and the taking of any and all action as may be necessary to carry out, give effect to and consummate the transactions contemplated by, each of said documents and, at the Closing Date, the Bonds will have been validly issued and delivered, the Subordinate Resolution, [the Escrow Agreement,] the Undertaking and this Contract of Purchase will constitute the valid, legal and binding obligations of the District enforceable in accordance with their respective terms (subject to the effect of, and restrictions and limitations imposed by or resulting from, (i) bankruptcy, insolvency, debt adjustment, moratorium, reorganization or other similar laws affecting creditors' rights, and (ii) judicial discretion) and the Subordinate Resolution will be in full force and effect;

(d) The District is not in breach of or in default under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States of America, or of any department, division, agency or instrumentality of either or any applicable court or administrative decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District is otherwise subject or bound which in any material way, directly or indirectly, affects the issuance of the Bonds or the validity thereof, the validity or adoption of the Subordinate Resolution or the execution and delivery of the Bonds, this Contract of Purchase, [the Escrow Agreement,] the Undertaking or the other instruments contemplated by any of such documents to which the District is a party, and the adoption of the Subordinate Resolution and compliance with the provisions of each will not, as of the date hereof and as of the Closing Date, conflict with or constitute a breach of or default in any material way under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States, or of any department, division, agency or instrumentality of either or any applicable court or administrative judgment, decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District or any of the property or assets of the Electric System (as defined in the Subordinate Resolution) are otherwise subject or bound, and no event which would have a material and adverse effect upon the financial condition of the District has occurred and is continuing which constitutes or with the passage of time or the giving of notice, or both, would constitute a default or event of default by the District under any of the foregoing;

(e) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Subordinate Resolution, the Undertaking and this Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, this Contract of Purchase, [the Escrow Agreement,] the Undertaking, the Bonds or the Subordinate Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained;

(f) The Bonds, when issued and delivered in accordance with the Subordinate Resolution and this Contract of Purchase and paid for by the Underwriters on the Closing Date as provided herein, will be validly issued and outstanding special obligations of the District enforceable against the District in accordance with their terms and entitled to all the benefits and security of the Subordinate Resolution; and, upon the issuance and delivery of the Bonds, the Subordinate Resolution will provide, for the benefit of the holders from time to time of the Bonds,

a legally valid and binding pledge of and lien on Net Subordinated Revenues pledged under the Subordinate Resolution, as provided in and contemplated by the Subordinate Resolution;

(g) The Preliminary Official Statement, as of its date and as of the date hereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(h) At the time of the District's acceptance hereof and (unless the Official Statement is amended or supplemented pursuant to paragraph (i) of Section 2 hereof) at all times subsequent to the date of delivery thereof up to and including the Closing Date, the Official Statement will be true, correct, complete and final in all material respects and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(i) If, after the date of this Contract of Purchase and until 25 days after the end of the "underwriting period" (as defined in Rule 15c2-12), any event shall occur that might cause the Official Statement to contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the District hereby covenants and agrees, to the extent it has knowledge of such event, to notify the Underwriters (and for the purposes of this clause to provide the Underwriters with such information as they may from time to time reasonably request), and, if in the opinion of the Underwriters and their counsel such event requires the preparation and publication of a supplement or amendment to the Official Statement, at its expense to supplement or amend the Official Statement in a form and manner approved by the Underwriters and furnish to the Underwriters a reasonable number of copies of such supplement or amendment. For purposes of this Contract of Purchase, the District may assume that the end of the "underwriting period" has occurred on the Closing Date unless the District is otherwise notified by the Underwriters on or prior to the Closing Date. If the Underwriters notify the District that the Closing Date is not the end of the "underwriting period", then the Underwriters shall further notify the District of the date that is the end of the "underwriting period" (as defined in Rule 15c2-12);

(j) If the Official Statement is supplemented or amended pursuant to paragraph (i) of Section 2 of this Contract of Purchase, at the time of each supplement or amendment thereto and (unless subsequently again supplemented or amended pursuant to such paragraph) at all times subsequent thereto during the "underwriting period", the Official Statement as so supplemented or amended will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which made, not misleading.

(k) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened (i) in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, (ii) affecting or seeking to prohibit, restrain or enjoin the issuance, sale or delivery of any of the Bonds, the application of the proceeds thereof in accordance

with the Subordinate Resolution, or the collection or application of Revenues (as defined in the Subordinate Resolution) or the collection or application of the Net Subordinated Revenues pledged to pay the principal of and interest on the Bonds under the Subordinate Resolution or in any way contesting or affecting the validity or enforceability of any of the Bonds, the Subordinate Resolution, the Undertaking, [the Escrow Agreement,] this Contract of Purchase or any action of the District contemplated by any of said documents, (iii) which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, (iv) contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or the powers of the District or its authority with respect to the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery of the Undertaking, [the Escrow Agreement,] or this Contract of Purchase, or any action of the District contemplated by any of said documents, and (v) which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor;

(l) The District will furnish such information, execute such instruments and take such other action in cooperation with the Underwriters as the Underwriters may reasonably request (i) to qualify the Bonds for offer and sale under the “Blue Sky” or other securities laws and regulations of such states and other jurisdictions of the United States as the Senior Underwriter may designate, and (ii) to determine the eligibility of the Bonds for investment under the laws of such states and other jurisdictions and will use its best efforts to continue such qualifications in effect so long as required for the distribution of the Bonds; provided that in connection therewith the District shall not be required to execute or file a general or special consent to service of process or qualify to do business in any jurisdiction and will advise the Senior Underwriter promptly of receipt by the District of any written notification with respect to the suspension of the qualification of the Bonds for sale in any jurisdiction or written notification of the initiation or threat of any proceeding for that purpose;

(m) The audited financial statements of the District for the years ending December 31, 2022 and December 31, 2021 heretofore delivered to the Underwriters and incorporated by reference in the Preliminary Official Statement and the Official Statement as Appendix B fairly present the financial position of the District as of the dates indicated and such financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis;

(n) Between the date hereof and the Closing Date, the District will not, without the prior written consent of the Senior Underwriter, offer or issue any bonds, notes or other obligations for borrowed money, or incur any material liabilities, direct or contingent, nor will there be any adverse change of a material nature in the financial position, results of operations or condition, financial or otherwise, of the District, in either case other than in the ordinary course of its business or as disclosed in the Preliminary Official Statement or the Official Statement or as otherwise disclosed to the Senior Underwriter;

(o) The Bonds, the Subordinate Resolution, [the Escrow Agreement,] and the Undertaking conform to the descriptions thereof contained in the Preliminary Official Statement and the Official Statement;

(p) The District has the legal authority to apply and will apply, or cause to be applied, the proceeds from the sale of the Bonds as provided in and subject to all of the terms and provisions of the Subordinate Resolution and as described in the Preliminary Official Statement and the Official Statement, including for payment of District expenses incurred in connection with the negotiation, marketing, issuance and delivery of the Bonds to the extent required by Section 7 (Expenses), and will not take or omit to take any action which action or omission will adversely affect the exclusion from gross income for federal income tax purposes of the interest on the Bonds;

(q) Any certificate signed by any official of the District, and delivered to the Underwriters, shall be deemed a representation and warranty by the District to the Underwriters as to the statements made therein; and

(r) Except as disclosed in the Preliminary Official Statement and the Official Statement, during the last five years the District has complied in all material respects with all previous undertakings required by Rule 15c2-12.

3. Conditions to the Obligations of the Underwriters. The obligations of the Underwriters to accept delivery of and pay for the Bonds on the Closing Date shall be subject to the performance by the District of its obligations to be performed hereunder at or prior to the Closing Date and to the fulfillment of the following conditions:

(a) The representations, warranties and covenants of the District contained herein shall be true, complete and correct on the date hereof and as of the Closing Date as if made on the Closing Date;

(b) At the Closing Date, the Subordinate Resolution shall have been duly adopted and shall be in full force and effect, and shall not have been repealed, amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters, and there shall have been taken in connection therewith, with the issuance of the Bonds and with the transactions contemplated thereby and by this Contract of Purchase, all such actions as, in the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel (“Bond Counsel”), shall be necessary and appropriate;

(c) At the Closing Date, the Official Statement shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters;

(d) At or prior to the Closing Date, the Underwriters shall have received copies of the following documents, in each case satisfactory in form and substance to the Underwriters:

(1) The Official Statement executed on behalf of the District by its Chief Executive Officer and General Manager, any Member of its Executive Committee, its Treasurer, its Secretary or its Chief Financial Officer (each an “Authorized Representative”);

(2) The Undertaking executed on behalf of the District by an Authorized Representative;

(3) The [Sixteenth] Supplemental Resolution, with only such supplements or amendments thereto as may have been agreed to by the Underwriters and certified by an authorized officer of the District under its seal as having been duly adopted by the District and as being in full force and effect, and the Subordinate Resolution, certified by an authorized officer of the District as being in full force and effect, with such supplements and amendments thereto adopted after the date hereof as may have been agreed to by the Underwriters;

(4) An opinion or opinions relating to the Bonds, dated the Closing Date and addressed to the District, of Bond Counsel, in substantially the form included in the Official Statement as Appendix [F], together with a letter or letters of such Bond Counsel, dated the Closing Date and addressed to the Underwriters, to the effect that the foregoing opinion or opinions addressed to the District may be relied upon by the Underwriters to the same extent as if such opinion or opinions were addressed to them;

(5) An opinion or opinions, dated the Closing Date and addressed to the Senior Underwriter, of Bond Counsel, in substantially the form attached hereto as Exhibit E;

(6) An opinion, dated the Closing Date and addressed to the Senior Underwriter, of General Counsel to the District, in substantially the form attached hereto as Exhibit C;

(7) An opinion, dated the Closing Date and addressed to the Underwriters, of Nixon Peabody LLP, as counsel for the Underwriters (“Underwriters’ Counsel”), to the effect that (i) the Bonds are exempt from the registration requirements of the Securities Act of 1933, as amended, and the Subordinate Resolution is exempt from qualification under the Trust Indenture Act of 1939, as amended; (ii) the Undertaking complies as to form in all material respects with the requirements of paragraph (b)(5) of the Rule applicable to the primary offering of the Bonds; and (iii) based upon the information made available to them in the course of their participation in the preparation of the Preliminary Official Statement and the Official Statement as counsel to the Underwriters and without having undertaken to determine independently, or assuming any responsibility for, the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement, they do not believe that (A) the Preliminary Official Statement, as of its date and as of the date of the Contract of Purchase, and (B) the Official Statement as of its date and as of the Closing Date, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except for the information relating to Cede & Co., DTC or the operation of the book-entry system, the Appendices to the Official Statement, except Appendices [C] and [E], and summaries thereof and references thereto, and other financial, accounting and statistical data included therein, as to all of which no view need be expressed); and (iii) with respect to such matters as the Underwriters may reasonably require;

(8) A certificate, dated the Closing Date, signed by an Authorized Representative of the District in substantially the form attached hereto as Exhibit D (but in

lieu of or in conjunction with such certificate the Underwriters may, in its sole discretion, accept certificates or opinions of General Counsel to the District, or of other counsel acceptable to the Underwriters, that in the opinion of such counsel the issues raised in any pending or threatened litigation referred to in such certificate are without substance or that the contentions of all plaintiffs therein are without merit);

(9) [the Escrow Agreement, executed by the District and the Escrow Agent;]

(10) An acceptance of and agreement to the provisions of the [Sixteenth] Supplemental Resolution executed by the Trustee under the Subordinate Master Resolution in form and substance acceptable to the Underwriters;

(11) A tax certificate related to the Bonds in substance and form satisfactory to Bond Counsel;

(12) Ratings of the Bonds from S&P Global Ratings (“S&P”) of not less than “[AA-]” and from Fitch Ratings, Inc. (“Fitch”) of not less than “[AA];”

(13) [A report of [_____], as verification agent (the “Verification Agent”) with respect to the sufficiency of amounts deposited pursuant to the Escrow Agreement and an opinion of Bond Counsel respecting the defeasance of the Refunded Bonds;]

(14) An opinion of counsel to the Trustee, dated the Closing Date, addressed to the Underwriters, to the effect that (i) the Trustee[/Escrow Agent] is a national banking association duly organized and validly existing under the laws of the United States of America having full power and being qualified to enter into, accept and agree to the provisions of the Subordinate Resolution and to enter into and perform the Undertaking and [the Escrow Agreement,] (ii) the Undertaking [and the Escrow Agreement have] been duly authorized, executed and delivered by the Trustee[/Escrow Agent] and, assuming due authorization, execution and delivery by the other parties thereto, constitutes the valid and binding obligation of the Trustee[/Escrow Agent] enforceable in accordance with its terms, subject to laws relating to bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting creditors’ rights generally, to the application of equitable principals and to the exercise of judicial discretion in appropriate cases, and to enter into and perform the Undertaking [and the Escrow Agreement,] (iii) all approvals, consents and orders of any governmental authority or agency having jurisdiction in this matter that would constitute a condition precedent to the performance by the Trustee[/Escrow Agent] of its duties and obligations under the Subordinate Resolution, [the Escrow Agreement,] and the Undertaking have been obtained and are in full force and effect, and (iv) the acceptance of the duties and obligations of the Trustee[/Escrow Agent] under the Subordinate Resolution, [the Escrow Agreement,] and the Undertaking and the consummation of the transactions on the part of the Trustee[/Escrow Agent] contemplated therein, and the compliance by the Trustee[/Escrow Agent], as applicable, with the terms, conditions and provisions of such document do not contravene any provisions of applicable law or regulation or any order or decree, writ or injunction or the Articles of Association or Bylaws of the Trustee[/Escrow

Agent], and, to the best knowledge of such counsel, will not require the consent under or result in a breach of or a default under, any resolution, agreement or other instrument to which the Trustee[/Escrow Agent] is a party or by which it may be bound;

(15) A copy of the Blanket Letter of Representations to DTC relating to the Bonds signed by DTC and the District; and

(16) Such additional legal opinions, certificates, instruments and other documents as the Underwriters may reasonably request to evidence the truth and accuracy and completeness, as of the date hereof and as of the Closing Date, of the District's representations and warranties contained herein and of the statements and information contained in the Preliminary Official Statement or the Official Statement, and the due performance or satisfaction by the District at or prior to the Closing Date of all agreements then to be performed and all conditions then to be satisfied by the District in connection with the transactions contemplated hereby and by the Subordinate Resolution and the Preliminary Official Statement or the Official Statement.

If any of the conditions to the obligations of the Underwriters contained in this Section or elsewhere in this Contract of Purchase with respect to the Bonds shall not have been satisfied when and as required herein, all obligations of the Underwriters hereunder with respect to the Bonds may be terminated by the Underwriters at, or at any time prior to, the Closing Date by written notice to the District.

4. **Offering.** The obligations of the District to sell and to deliver the Bonds on the Closing Date to the Underwriters shall be subject to the following conditions:

(a) The entire \$[PAR] aggregate principal amount of the Bonds shall be purchased, accepted and paid for by the Underwriters on the Closing Date; and

(b) The District shall receive an Issue Price Certificate of the Senior Underwriter substantially in the form attached hereto as Exhibit F with respect to the Bonds.

5. **Issue Price of the Bonds.**

(a) The Senior Underwriter, on behalf of the Underwriters, agrees to assist the District in establishing the issue price of the Bonds and shall execute and deliver to the District at Closing an "issue price" or similar certificate substantially in the form attached hereto as Exhibit F, together with the supporting pricing wires or equivalent communications, with modifications to such certificate as may be deemed appropriate or necessary, in the reasonable judgment of the Senior Underwriter, the District and Bond Counsel, to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds.

(b) [Except for the maturities set forth in Schedule A attached hereto,] the District will treat the first price at which 10% of each maturity of the Bonds (the "10% test") is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test).

(c) [The Senior Underwriter confirms that the Underwriters have offered the Bonds to the public on or before the date of this Contract of Purchase at the offering price or prices (the “initial offering price”), or at the corresponding yield or yields, set forth in the final Official Statement. Schedule A sets forth, as of the date of this Contract of Purchase, the maturities, if any, of the Bonds for which the 10% test has not been satisfied and for which the District and the Senior Underwriter, on behalf of the Underwriters, agree that (i) the Senior Underwriter will retain all unsold Bonds of each maturity for which the 10% test has not been satisfied and not allocate any such Bonds to any other Underwriter and (ii) the restrictions set forth in the next sentence shall apply, which will allow the District to treat the initial offering price to the public of each such maturity as of the sale date as the issue price of that maturity (the “hold-the-offering-price rule”). So long as the hold-the-offering-price rule remains applicable to any maturity of the Bonds, the Senior Underwriter will neither offer nor sell unsold Bonds of that maturity to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following:

(1) the close of the fifth (5th) business day after the sale date; or

(2) the date on which the Underwriters have sold at least 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public.

The Senior Underwriter shall promptly advise the District or the District’s municipal advisor when the Underwriters have sold 10% of that maturity of the Bonds to the public at [a price] that is no higher than the initial offering price to the public, if that occurs prior to the close of the fifth (5th) business day after the sale date.

The District acknowledges that, in making the representation set forth in this subsection, the Senior Underwriter will rely on (i) the agreement of each Underwriter to comply with the hold-the-offering-price rule, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an Underwriter is a party to a retail distribution agreement that was employed in connection with the initial sale of the Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, as set forth in the retail distribution agreement and the related pricing wires. The District further acknowledges that each Underwriter shall be solely liable for its failure to comply with its agreement regarding the hold the offering price rule and that no Underwriter shall be liable for the failure of any other Underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a retail distribution agreement to comply with its agreement regarding the hold-the-offering-price rule as applicable to the Bonds.]

(d) [The Senior Underwriter confirms that:

(1) any agreement among underwriters, any selling group agreement and each retail distribution agreement (to which the Senior Underwriter is a party) relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter,

each dealer who is a member of the selling group, and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (A)(i) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (ii) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Senior Underwriter and as set forth in the related pricing wires, (B) promptly notify the Senior Underwriter of any sales of the Bonds that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the Bonds to the public (each such term being used as defined below) and (C) acknowledge that, unless otherwise advised by the Underwriter, dealer or broker-dealer, the Senior Underwriter shall assume that each order submitted by the Underwriter, dealer or broker-dealer is a sale to the public; and

(2) any agreement among underwriters relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the Bonds to the public to require each broker-dealer that is a party to such retail distribution agreement to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter or the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Senior Underwriter or the Underwriter and as set forth in the related pricing wires.

(e) The Underwriters acknowledge that sales of any Bonds to any person that is a related party to an Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

(1) “public” means any person other than an underwriter or a related party,

(2) “underwriter” means (A) any person that agrees pursuant to a written contract with the District (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public),

(3) a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (i) more than 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of

the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

(4) “sale date” means the date of execution of this Contract of Purchase by all parties.

6. Termination. The Underwriters shall have the right to terminate their obligations under this Contract of Purchase to purchase, accept delivery of and to pay for the Bonds, if,

(a) between the date hereof and the Closing Date, the market price or marketability, or the ability of the Underwriters to enforce contracts for the sale, at the initial offering prices set forth in the Official Statement, of the Bonds have been materially adversely affected, in the judgment of the Underwriters, (evidenced by a written notice to the District terminating the obligation of the Underwriters to accept delivery of and pay for the Bonds), by reason of any of the following:

(1) (x) any legislation which is (A) enacted by Congress, (B) favorably reported for passage to either House of the Congress of the United States by any Committee of such House to which such legislation has been referred for consideration, or (C) recommended to the Congress for passage by the President of the United States or the Treasury Department, but only, however, if the occurrence of any of the foregoing events is generally accepted by the municipal bond market as potentially affecting the federal tax status of the District, its property or income or the interest on its bonds or notes (including the Bonds), (y) any decision rendered by a court established under Article III of the Constitution of the United States or the Tax Court of the United States, or (z) a final order, ruling, regulation or official statement issued or made by or on behalf of the Treasury Department of the United States or the Internal Revenue Service with the purpose or effect, directly or indirectly, of imposing federal income taxation upon such interest as would be received by the holders of the Bonds, or upon such revenues or other income of the general character expected to be received by the District, provided, however, that the enactment of legislation which only diminishes the value of, as opposed to eliminating the exclusion from gross income for federal income tax purposes will not give the Underwriters the right to terminate their obligations hereunder.

(2) Legislation enacted (or resolution passed) by the Congress or a final order, ruling, regulation or official statement is issued or made by or on behalf of the Securities and Exchange Commission, or any other governmental agency having jurisdiction of the subject matter, to the effect that obligations of the general character of the Bonds are not exempt from registration under or other requirements of the Securities Act of 1933, as amended, or are not exempt from qualification under, or other requirements of, the Trust Indenture Act of 1939, as amended, or that the issuance, offering or sale of the Bonds or obligations of the general character of the Bonds, including any or all underlying arrangements, as

contemplated hereby or by the Preliminary Official Statement or the Official Statement, otherwise is or would be in violation of the federal securities laws as amended and then in effect;

(3) Any new material outbreak or escalation of hostilities having a material effect on the financial markets of the United States or the declaration by the United States of a national emergency or war or the occurrence of any other local, national or international calamity, crisis or event relating to the effective operation of the government of or the financial community in the United States, including, without limitation, a downgrade of the sovereign debt rating of the United States or an escalation thereof by any major credit rating agency or payment default on United States Treasury obligations;

(4) the declaration of a general banking moratorium by federal, New York or California authorities, or the general suspension of trading on the New York Stock Exchange or any other national securities exchange, or any material disruption in commercial banking or securities settlement, or payment services or clearing services;

(5) the imposition by the New York Stock Exchange or other national securities exchange, or any governmental authority, of any material restrictions not now in force with respect to the Bonds or obligations of the general character of the Bonds or securities generally, or the material increase of any such restrictions now in force, including those relating to the net capital requirements of, the Underwriters;

(6) the adoption of any amendment to the federal or California Constitution, decision by any federal or California court, or enactment by any federal or California legislative body materially adversely affecting (i) the District or the right of the District to receive or to pledge any of the Net Subordinated Revenues, or (ii) the validity or enforceability of this Contract of Purchase, the Bonds or the Subordinate Resolution;

(7) the adoption of any amendment to the California Constitution, decision by any California court, or enactment by any California legislative body adversely affecting the exemption of state or local income tax upon such interest as would be received by the holders of the Bonds, or

(8) (i) a downgrading or suspension of any rating (without regard to credit enhancement) by Moody's, S&P, or Fitch of any debt securities issued by the District, or (ii) there shall have been any official statement as to a possible downgrading (such as being placed on "credit watch" or "negative outlook" or any similar qualification) of any rating by Moody's, S&P or Fitch of any debt securities issued by the District, including the Bonds.

(b) an event occurs, or information becomes known, which, in the judgment of the Underwriters, makes untrue in any material respect any statement or information contained in the

Official Statement, or has the effect that the Official Statement contains any untrue statement of material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

7. **Expenses.** (a) Except as set forth in paragraph (b) of this Section, the Underwriters shall be under no obligation to pay, and the District shall pay, or cause to be paid, all expenses incident to the performance of the District's obligations hereunder including, but not limited to, the cost of word processing and reproducing, executing and delivering the Bonds to the Underwriters; the cost of preparation, printing (and/or word processing and reproducing), distribution and delivery of the Subordinate Resolution; the cost of printing and distributing copies of the Preliminary Official Statement and the Official Statement in sufficient quantities for distribution in connection with the sale of the Bonds (including resales in the secondary market); the fees and disbursements of Bond Counsel; the fees and disbursements of Public Financial Management, Inc. for its services as Municipal Advisor to the District; the fees and disbursements of any other engineers, accountants, and any other experts or consultants retained in connection with the issuance of the Bonds; the fees and disbursements of the Trustee[/Escrow Agent and Verification Agent]; fees charged by the rating agencies for rating the Bonds; any advertising expenses; filing fees; CUSIP charges; or fees and expenses of any credit enhancement; expenses incurred by the Underwriters on behalf of the District relating to food, transportation or lodging for District staff members attending the bond pricing are to be reimbursed by the District through proceeds of the Bonds or available funds of the District (the District's obligations in regard to these expenses survive if delivery of the Bonds fails due to one of the conditions set forth in Section 3 hereof or this Contract of Purchase is terminated pursuant to Section 6 hereof) and any other expenses not specifically enumerated in paragraph (b) of this Section incurred in connection with the issuance of the Bonds.

(b) The District shall be under no obligation to pay, and the Underwriters shall pay (from the expense component of the underwriting discount), the cost of preparation of the Agreement Among Underwriters and the letter of instructions relating thereto and this Contract of Purchase; the cost of wiring funds for the payment of the purchase price of the Bonds; the fees and expenses of DTC incurred with respect to depositing the Bonds therewith; expenses to qualify the Bonds for sale under any "Blue Sky" laws; fees to the California Debt and Investment Advisory Commission; and all other expenses incurred by the Underwriters in connection with its public offering and distribution of the Bonds not specifically enumerated in paragraph (a) of this Section, including the fees and disbursements of Underwriters' Counsel. Notwithstanding that the fees to the California Debt and Investment Advisory Commission are solely the legal obligation of the Underwriters, the District agrees to reimburse the Underwriters for such fees.

8. **Notices.** Any notice or other communication to be given to the District under this Contract of Purchase may be given by delivering the same in writing to Sacramento Municipal Utility District, at 6201 S Street, Sacramento, California 95817-1899; and any notice or other communication to be given to the Underwriters under this Contract of Purchase may be given by delivering the same in writing to Barclays Capital Inc., 10250 Constellation Blvd, Suite 750, Los Angeles, CA 90067, Attention: Christopher D. Roberts, Director.

9. **Parties in Interest.** This Contract of Purchase is made solely for the benefit of the District and the Underwriters (including successors or assigns of any Underwriter) and no other

person shall acquire or have any right hereunder or by virtue hereof. The term “successors and assigns” as used in this Section shall not include any purchaser of the Bonds, as such purchaser, from any of the several Underwriters.

10. Survival of Representations and Warranties. The representations and warranties of the District, set forth in or made pursuant to this Contract of Purchase, shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the closing or termination of this Contract of Purchase and regardless of any investigations or statements as to the results thereof made by or on behalf of the Underwriters and regardless of delivery of and payment for the Bonds.

11. Counterparts. This Contract of Purchase may be executed in several counterparts, which together shall constitute one and the same instrument.

12. California Law Governs; Venue. The validity, interpretation and performance of this Contract of Purchase shall be governed by the laws of the State of California. Any action or proceeding to enforce or interpret this Contract of Purchase shall be brought, commenced or prosecuted in the County of Sacramento, California.

13. Entire Agreement. This Contract of Purchase when accepted by you in writing as heretofore specified shall constitute the entire agreement between us.

[remainder of page intentionally left blank]

14. **Effectiveness.** This Contract of Purchase shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by an authorized officer of the District and shall be valid and enforceable as of the time of such acceptance.

Very truly yours,

BARCLAYS CAPITAL INC., [UNDERWRITING
GROUP TO COME]

BY: BARCLAYS CAPITAL INC., as Senior
Underwriter

Christopher D. Roberts
Director

Accepted: [SALE DATE]

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Russell Mills
Treasurer

[Signature page to Contract of Purchase]

Exhibit A

SACRAMENTO MUNICIPAL UTILITY DISTRICT

[\$PAR] Subordinated Electric Revenue Refunding Bonds, [2023 Series A]

<u>Maturity</u> <u>(August 15)</u>	<u>Principal</u> <u>Amount</u>	<u>End of Initial</u> <u>Term Rate Period</u>	<u>Mandatory</u> <u>Tender Date</u>	<u>Initial</u> <u>Term Rate</u>	<u>Yield</u>	<u>Price</u>
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SACRAMENTO MUNICIPAL UTILITY DISTRICT

**Exhibit B to the Contract of Purchase
(Official Statement)**

SACRAMENTO MUNICIPAL UTILITY DISTRICT

**Exhibit C to the Contract of Purchase
(Opinion of General Counsel to the
Sacramento Municipal Utility District)**

[CLOSING DATE]

Barclays Capital Inc.
10250 Constellation Blvd, Suite 750
Los Angeles, CA 90067

Re: Sacramento Municipal Utility District
\$[PAR] Subordinated Electric Revenue Refunding Bonds, [2023 Series A]

Ladies and Gentlemen:

This opinion is being delivered pursuant to Paragraph 3(d)(6) of the Contract of Purchase (the “Contract of Purchase”), dated [SALE DATE] between Barclays Capital Inc., as Senior Managing Underwriter named therein (the “Senior Underwriter”), and the Sacramento Municipal Utility District (the “District”) relating to the above-captioned bonds (the “Bonds”).

As counsel to the District, I have reviewed (i) Resolution No. 85-11-1 of the District, adopted on November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001, as amended and supplemented to date, including as amended and supplemented by Resolution No. [RESO NO.], adopted on [May 18, 2023] (as so amended and supplemented, the “Subordinate Resolution”); (ii) the Continuing Disclosure Agreement, dated the date hereof (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association, as trustee (in such capacity, the “Trustee”); (iii) the Preliminary Official Statement of the District, dated [POS DATE] (the “Preliminary Official Statement”); (iv) the Official Statement of the District, dated [SALE DATE] (the “Official Statement”); [(v) the Escrow Agreement, dated the date hereof (the “Escrow Agreement”), between the District and U.S. Bank Trust Company, National Association, as escrow agent (in such capacity, the “Escrow Agent”);] and (vi) such other documents, opinions and matters to the extent I deemed necessary to provide the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. I have assumed the genuineness of all documents and signatures presented to me (whether as originals or as copies) and the due and legal execution and delivery by, and validity against, any parties other than the District. I have not undertaken to verify independently, and have assumed, the accuracy of the factual matters represented, warranted or certified in the documents referred to in the second paragraph hereof. I have further assumed compliance with all covenants and agreements contained in such documents.

I call attention to the fact that the rights and obligations under the Subordinate Resolution, [the Escrow Agreement,] the Undertaking and the Contract of Purchase may be subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, and to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. I express no opinion with respect to any indemnification, contribution, choice of law, choice of forum or waiver provisions contained therein.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, I am of the opinion that:

1. The District is a political subdivision of the State of California duly organized and validly existing under the Act, as amended, and has full legal right, power and authority to execute and deliver (or adopt, as the case may be), and to perform its obligations under, the Subordinate Resolution, [the Escrow Agreement,] the Undertaking and the Contract of Purchase.

2. The Contract of Purchase, [the Escrow Agreement,] and the Undertaking have been duly authorized, executed and delivered by the District, and, assuming due authorization, execution and delivery by each of the parties thereto other than the District, constitute the legal, valid and binding obligations of the District, enforceable against the District in accordance with their respective terms.

3. The District is not in breach of or default under any existing constitutional provision, applicable law or administrative regulation of the State of California or the United States or any applicable judgment or decree or any loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject which would have a material adverse effect on the financial condition or operations of the District, and no event has occurred and is continuing which with the passage of time or the giving of notice, or both, would constitute a default or event of default under any such instrument which would have a material adverse effect on the financial condition or operations of the District; and the execution and delivery of the Bonds, [the Escrow Agreement,] the Undertaking and the Contract of Purchase and the adoption of the Subordinate Resolution, and compliance with any existing constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject will not, as of the date hereof, conflict with or constitute a breach of or default under any such instrument which would have a material adverse effect on the financial condition or operations of the District, nor will any such execution, delivery, adoption or compliance result in the creation or imposition of any lien, charge or other security interest or encumbrance of any nature whatsoever upon any of the property or assets of the District or under the terms of any such law, regulation or instrument, except as expressly provided by the Bonds and the Subordinate Resolution.

4. The statements contained in the Preliminary Official Statement and the Official Statement which purport to describe certain provisions of the Bonds, the Undertaking, [the Escrow

Agreement,] and the Subordinate Resolution present a fair and accurate summary of such provisions for the purpose of use in the Preliminary Official Statement and the Official Statement.

5. Except as described or referred to in the Preliminary Official Statement and the Official Statement, as of the date hereof, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body, pending or, to the best of my knowledge, threatened against the District affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of the Revenues (as defined in the Subordinate Resolution) or the Net Subordinated Revenues (as defined in the Subordinate Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds or contesting or affecting as to the District the validity or enforceability of the Act, the Bonds, the Subordinate Resolution, [the Escrow Agreement,] the Contract of Purchase or the Undertaking, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery by the District of the Contract of Purchase, [the Escrow Agreement,] or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act or the authorization, execution, delivery or performance by the District of the Bonds, the Subordinate Resolution, [the Escrow Agreement,] the Undertaking or the Contract of Purchase.

6. Based upon my review of the Preliminary Official Statement and the Official Statement as General Counsel to the District and without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement (except as specifically set forth in paragraph 4 hereof), I have no reason to believe that the statements contained in the Preliminary Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Preliminary Official Statement, and other financial and statistical data included therein, as to all of which I express no view) as of its date and as of the date of the Contract of Purchase contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and the Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Official Statement, and other financial and statistical data included therein, as to all of which I express no view) (A) as of the date of the Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading or (B) as of the date hereof contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

For purposes of the opinions expressed herein, I have assumed that an agreement or other document is “material” to the District if it involves amounts in excess of \$10,000,000 and that a matter would result in a “material adverse change” to the District if the financial consequences involved would exceed \$10,000,000.

I understand that you are relying upon the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, with respect to the validity of the Bonds and the exclusion of interest on the Bonds from gross income for federal income tax purposes and the Bonds for purposes of State of California income taxation and, accordingly, render no opinion with respect thereto.

Very truly yours,

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Exhibit D to the Contract of Purchase

CERTIFICATE

The Sacramento Municipal Utility District (the “District”), hereby certifies that:

(1) The representations and warranties of the District (excluding those representations and warranties contained in Section 2(e) and Section 2(k) of the hereinafter defined Contract of Purchase) contained in the Contract of Purchase, dated [SALE DATE], between the District and the Underwriters named therein (the “Contract of Purchase”) with respect to the sale by the District of \$[PAR] principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, [2023 Series A] (the “Bonds”), are true and correct on and as of the Closing Date as if made on the Closing Date.

(2) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Subordinate Resolution, [the Escrow Agreement,] the Undertaking and the Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, the Contract of Purchase, [the Escrow Agreement,] the Undertaking, the Bonds or the Subordinate Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained.

(3) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the best of knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened against the District, in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of any of the Bonds or the collection of the Revenues (as defined in the Subordinate Resolution) or the Net Subordinated Revenues (as defined in the Subordinate Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds, or in any way contesting or affecting as to the District the validity or enforceability

of the Act, the Bonds, the Subordinate Resolution, the Contract of Purchase, [the Escrow Agreement,] the Undertaking, or any action of the District contemplated by any of said documents, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution system, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery by the District of the Contract of Purchase, [the Escrow Agreement,] or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act of the authorization, execution, delivery or performance by the District of the Bonds, the Subordinate Resolution, the Undertaking, [the Escrow Agreement,] or the Contract of Purchase, or any action of the District contemplated by any of said documents, or which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor.

(4) No event affecting the District has occurred (with respect to the Preliminary Official Statement, from its date to the date of the Contract of Purchase, and with respect to the Official Statement, since the date of the Official Statement) which should have been or should be disclosed in the Preliminary Official Statement or the Official Statement so that the Preliminary Official Statement or the Official Statement did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and which has not been disclosed in a supplement or amendment to the Preliminary Official Statement or the Official Statement.

(5) The District has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the date hereof pursuant to the Contract of Purchase with respect to the issuance of the Bonds.

(6) All capitalized terms employed herein which are not otherwise defined shall have the same meanings as in the Contract of Purchase.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____

Name:

Title:

Dated: [CLOSING DATE]

**Exhibit E to the Contract of Purchase
(Supplemental Opinion of Bond Counsel)**

[Under Review]

[CLOSING DATE]

Barclays Capital Inc.
10250 Constellation Blvd, Suite 750
Los Angeles, CA 90067

Re: Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds,
[2023 Series A]

(Supplemental Opinion)

Ladies and Gentlemen:

This letter is addressed to you, as Senior Underwriter, pursuant to Section 3(d)(5) of the Contract of Purchase, dated [SALE DATE] (the “Purchase Contract”), between you and the other underwriters named therein and the Sacramento Municipal Utility District (“SMUD”), providing for the purchase of \$[PAR] principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, [2023 Series A] (the “2023 Subordinated Bonds”). The 2023 Subordinated Bonds are being issued pursuant to Resolution No. 85-11-1 of the Board of Directors of SMUD, adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted June 21, 2001, as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. [RESO NO.], adopted [May 18, 2023] (the “[Sixteenth] Supplemental Resolution”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution or, if not defined in the Resolution, in the Purchase Contract.

In connection with our role as Bond Counsel to SMUD, we have reviewed the Purchase Contract; the Resolution; the Subordinate Master Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; certain portions of the preliminary official statement of SMUD, dated [POS DATE], with respect to the 2023 Subordinated Bonds (the “Preliminary Official Statement”) and of the official statement of SMUD, dated [SALE DATE], with respect to the 2023 Subordinated Bonds (the “Official Statement”); opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to provide the opinions and conclusions set forth herein.

The opinions and conclusions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions or conclusions may be affected by actions taken or omitted or events occurring after the original delivery of the 2023 Subordinated Bonds on the date hereof. We have

not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the original delivery of the 2023 Subordinated Bonds on date hereof. We have assumed the genuineness of all documents and signatures provided to us (whether as originals or as copies) and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. We have further assumed compliance with all covenants and agreements contained in such documents. In addition, we call attention to the fact that the rights and obligations under the 2023 Subordinated Bonds, the Resolution, the Tax Certificate and the Purchase Contract and their enforceability may be subject to bankruptcy, insolvency, reorganization, receivership, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinions with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions and conclusions:

1. The 2023 Subordinated Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Resolution is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended.
2. The Purchase Contract has been duly executed and delivered by, and constitutes a valid and binding obligation of, SMUD.
3. The statements contained in the Preliminary Official Statement and the Official Statement under the captions [“THE 2023 SUBORDINATED BONDS” (except information relating to book-entry or The Depository Trust Company), “SECURITY FOR THE 2023 SUBORDINATED BONDS” and “TAX MATTERS” and in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION,” and APPENDIX E – “SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION”] **[To be updated when POS is available]** excluding any material that may be treated as included under such captions by cross-reference or reference to other documents or sources, insofar as such statements expressly summarize certain provisions of the Resolution, the Subordinate Master Resolution and the form and content of our final legal opinion as Bond Counsel to SMUD concerning the validity of the 2023 Subordinated Bonds and certain other matters, dated the date hereof and addressed to SMUD, are accurate in all material respects.

4. We are not passing upon and do not assume any responsibility for the accuracy (except as explicitly stated in paragraph 3 above), completeness or fairness of any of the statements contained in the Preliminary Official Statement or in the Official Statement and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. We do not assume any responsibility for any electronic version of the Preliminary Official Statement or the Official Statement, and assume that any such version is identical in all respects to the printed version. In our capacity as Bond Counsel to SMUD in connection with issuance of the 2023 Subordinated Bonds, we participated in conferences with your representatives, your counsel, representatives of SMUD, its counsel, accountants, and others, during which the contents of the Preliminary Official Statement or the Official Statement and related matters were discussed. Based on our participation in the above-mentioned conferences (which did not extend beyond the date of the Official Statement), and in reliance thereon, on oral and written statements and representations of SMUD and others and on the records, documents, certificates, opinions and matters herein mentioned, subject to the limitations on our role as Bond Counsel to SMUD, we advise you as a matter of fact and not opinion that (a) as of [SALE DATE], no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Preliminary Official Statement which caused us to believe as of that date that the Preliminary Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and (b) as of the date of the Official Statement and as of the date hereof, no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Official Statement which caused us to believe as of the date of the Official Statement and as of the date hereof that the Official Statement contained or contains any untrue statement of a material fact or omitted or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, we expressly exclude from the scope of this paragraph and express no view or opinion about (i) any difference in information contained in the Preliminary Official Statement compared to what is contained in the Official Statement, whether or not related to pricing or sale of the 2023 Subordinated Bonds, and whether any such difference is material and should have been included in the Preliminary Official Statement, and (ii) with respect to both the Preliminary Official Statement and the Official Statement, any CUSIP numbers, financial, accounting, statistical or economic, engineering or demographic data or forecasts, numbers, charts, tables, graphs, estimates, projections, assumptions or expressions of opinion, any statements about compliance with prior continuing disclosure undertakings, any information about Cede & Co., The Depository Trust Company or book-entry, ratings, rating agencies, underwriters, underwriting and the information contained in Appendices B and C included or referred to therein or omitted therefrom. No responsibility is undertaken or view expressed with respect to any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement or the Official Statement.

This letter is furnished by us as Bond Counsel to SMUD. No attorney-client relationship has existed or exists between our firm and you in connection with the 2023 Subordinated Bonds or by virtue of this letter. We disclaim any obligation to update this letter. This letter is delivered to you as Senior Underwriter of the 2023 Subordinated Bonds, is solely for your benefit as such Senior Underwriter in connection with the original delivery of the 2023 Subordinated Bonds on the date hereof, and is not to be used, circulated, quoted or otherwise referred to or relied upon for

any other purpose or by any other person. This letter is not intended to, and may not, be relied upon by owners of 2023 Subordinated Bonds or by any other party to whom it is not specifically addressed.

Very truly yours,

Exhibit F to the Contract of Purchase

(Form of Issue Price Certificate Of The Senior Underwriter Regarding Offering Prices)

Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, [2023 Series A]

The undersigned, on behalf of Barclays Capital Inc., as representative (the “Representative”) of itself [UNDERWRITING GROUP TO COME] (together, the “Underwriting Group”), hereby certifies, on its own behalf and on behalf of the other members of the Underwriting Group on the basis of representations and warranties set forth in the agreement among underwriters, as set forth below with respect to the sale and issuance of the above-captioned obligations (the “Bonds”).

1. ***Sale of the [General Rule Maturities][Bonds].*** As of the date of this Certificate, for each Maturity of the [General Rule Maturities][Bonds], the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A.

2. ***[Initial Offering Price of the Hold-the-Offering-Price-Maturities.***

(a) The Underwriting Group offered the Hold-the-Offering-Price Maturities to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Bonds is attached to this Certificate as Schedule B.

(b) As set forth in the Bond Purchase Agreement for the Bonds, the Representative has agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the unsold Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) unsold Bonds of the Hold-the-Offering-Price Maturities shall be retained by the Representative and not allocated to any of the other Underwriters. Pursuant to such agreement, the Representative has not offered or sold any unsold Bonds of any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.]

3. ***Defined Terms.***

(a) [*General Rule Maturities* means those Maturities of the Bonds listed in Schedule A hereto as the “General Rule Maturities.”]

(b) [*Hold-the-Offering-Price Maturities* means those Maturities of the Bonds listed in Schedule A hereto as the “Hold-the-Offering-Price Maturities.”]

(c) [*Holding Period* means, with respect to a Hold-the-Offering-Price Maturity, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date, or (ii) the date on which the Underwriters have sold at least 10% of such Hold-the-Offering-Price Maturity to the Public at prices that are no higher than the Initial Offering Price for such Hold-the-Offering-Price Maturity.]

(d) *Issuer* means Sacramento Municipal Utility District.

(e) *Maturity* means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(f) *Public* means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a Related Party (as such terms are defined below) to an Underwriter.

(g) A purchaser of any of the Bonds is a *Related Party* to any Underwriter if the Underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other).

(h) *Sale Date* means the first day on which there is a binding contract in writing for the sale of a Maturity of the Bonds. The Sale Date of the Bonds is [SALE DATE].

(i) *Underwriter* means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The representations set forth in this certificate are limited to factual matters only, and as it relates to the actions of the other Underwriters, such representations are made to the best of the Representative's knowledge based on the Representative's records. Nothing in this certificate represents the Representative's interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Issuer, in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds.

Dated: [CLOSING DATE]

Barclays Capital Inc., as representative of the Underwriting Group

By: _____

Name: _____

Schedule A

Sale Prices

\$(PAR) Subordinated Electric Revenue Refunding Bonds, [2023 Series A]

<u>Maturity</u> <u>(August 15)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield</u>	<u>Price</u>	<u>Hold-the-Price</u> <u>Maturities</u>	<u>General Rule</u> <u>Maturities</u>
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Schedule B

Pricing Wire or Equivalent Communication

Not applicable, because there are no Hold-the-Offering-Price Maturities

Attached

PRELIMINARY OFFICIAL STATEMENT DATED [____], 2023

NEW ISSUE - FULL BOOK-ENTRY

Ratings: See "RATINGS" herein

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD, based upon an analysis of existing laws, regulations, rulings and court decisions and, assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2023 Series K Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. In the further opinion of Bond Counsel, interest on the 2023 Series K Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. Bond Counsel observes that, for tax years beginning after December 31, 2022, interest on the 2023 Series K Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2023 Series K Bonds. See "TAX MATTERS."



**[\$[PRINCIPAL AMOUNT]*
ELECTRIC REVENUE REFUNDING BONDS, 2023 SERIES K**

Dated: Date of Delivery**Due: August 15, as shown on the inside cover**

The Electric Revenue Refunding Bonds, 2023 Series K (the "2023 Series K Bonds") will be issued pursuant to the provisions of Resolution No. 6649 of the Sacramento Municipal Utility District ("SMUD"), as amended and supplemented, and will be payable from the Net Revenues of the Electric System of SMUD, as described herein. The 2023 Series K Bonds are being issued to (i) refund SMUD's Electric Revenue Refunding Bonds, 2013 Series B (the "2013B Refunded Bonds"), and (ii) pay certain costs associated with the issuance of the 2023 Series K Bonds. See "PLAN OF FINANCE."

The 2023 Series K Bonds will mature in the years and amounts as shown on the inside cover. Interest on the 2023 Series K Bonds will accrue at the rates set forth on the inside cover and be payable on [August] 15, 20[23], and semiannually thereafter on each February 15 and August 15.

[The 2023 Series K Bonds are not subject to redemption prior to maturity.][tbc]

The 2023 Series K Bonds will be issued in fully registered form and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). DTC will act as securities depository (the "Securities Depository") for the 2023 Series K Bonds. Individual purchases of interests in the 2023 Series K Bonds may be made in book-entry form only, in the principal amount of \$5,000 or any integral multiple thereof. Purchasers of such interests will not receive certificates representing their interests in the 2023 Series K Bonds. Principal and interest are payable directly to the Securities Depository by U.S. Bank Trust Company, National Association, Trustee and Paying Agent. Upon receipt of payments of principal and interest, the Securities Depository will in turn remit such principal and interest to the Securities Depository's Direct Participants (as such term is herein defined) for subsequent disbursement to the purchasers of interests in the 2023 Series K Bonds, as described herein. See APPENDIX C – "BOOK-ENTRY SYSTEM."

The principal of and interest on the 2023 Series K Bonds, together with the debt service on other Parity Bonds (as defined herein), are payable exclusively from and secured by a pledge of the Net Revenues of the Electric System of SMUD. Neither the credit nor the taxing power of SMUD or the State of California is pledged to the payment of the 2023 Series K Bonds.

The information presented on this cover page is for general reference only and is qualified in its entirety by reference to the entire Official Statement and the documents summarized and described herein.

The 2023 Series K Bonds are offered when, as and if issued and received by the Underwriters, subject to the approval of the validity of the 2023 Series K Bonds and certain other legal matters by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. Certain legal matters will be passed on for the Underwriters by their counsel, Nixon Peabody LLP, San Francisco, California. It is expected that the 2023 Series K Bonds will be available for delivery through the facilities of DTC on or about [____], 2023*.

Barclays

BofA Securities

[_____]

[_____]

[____], 2023

* Preliminary, subject to change.

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California**

**[\$[PRINCIPAL AMOUNT]]*
ELECTRIC REVENUE REFUNDING BONDS, 2023 SERIES K**

MATURITY SCHEDULE*

Due (August 15)	Amount	Interest Rate	Yield	CUSIP[†]
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* Preliminary, subject to change.

† CUSIP[®] is a registered trademark of the American Bankers Association. CUSIP[®] data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP[®] numbers have been assigned by an independent company not affiliated with SMUD or the Underwriters and are included solely for the convenience of the registered owners of the applicable 2023 Series K Bonds. Neither SMUD nor the Underwriters are responsible for the selection or uses of these CUSIP[®] numbers, and no representation is made as to their correctness on the applicable 2023 Series K Bonds or as included herein. The CUSIP[®] number for a specific maturity is subject to being changed after the execution and delivery of the 2023 Series K Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the 2023 Series K Bonds.

SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS

Heidi Sanborn, President
Rosanna Herber, Vice President
Brandon Rose
Nancy Bui-Thompson
Gregg Fishman
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Frankie McDermott, Chief Operating Officer
Jennifer Davidson, Chief Financial Officer
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Lora Anguay, Chief Zero Carbon Officer
Farres Everly, Director, Communications, Marketing and Community Relations
Russell Mills, Treasurer
Lisa Limcaco, Controller

SPECIAL SERVICES

ORRICK, HERRINGTON & SUTCLIFFE LLP
Bond Counsel

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION
Trustee and Paying Agent

BAKER TILLY VIRCHOW KRAUSE, LLP, Madison, Wisconsin
Independent Accountants

PFM FINANCIAL ADVISORS LLC, Philadelphia, Pennsylvania
Municipal Advisor

EVERCREST ADVISORS, LLC
Swap Advisor

□
Verification Agent

No dealer, broker, salesperson or other person has been authorized by SMUD or the Underwriters to give any information or to make any representations with respect to the 2023 Series K Bonds other than those contained in this Official Statement and, if given or made, such information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell nor the solicitation of an offer to buy, nor shall there be any sale of the 2023 Series K Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been obtained from SMUD and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation of, the Underwriters. The information and expressions of opinion stated herein are subject to change without notice. The delivery of this Official Statement shall not, under any circumstances, create any implication that there has been no change in the affairs of SMUD since the date hereof. The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with and as part of their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The 2023 Series K Bonds have not been registered under the Securities Act of 1933, as amended, in reliance upon an exemption from the registration requirements contained in such Act. The 2023 Series K Bonds have not been registered or qualified under the securities laws of any state.

IN CONNECTION WITH THE OFFERING OF THE 2023 SERIES K BONDS THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICES OF SUCH BONDS AT LEVELS ABOVE THOSE THAT MIGHT OTHERWISE PREVAIL ON THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE UNDERWRITERS MAY OFFER AND SELL THE 2023 SERIES K BONDS TO CERTAIN DEALERS AND OTHERS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES SET FORTH ON THE INSIDE COVER PAGE HEREOF AND SAID PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT

Certain statements included or incorporated by reference in this Official Statement constitute “forward-looking statements.” Such statements generally are identifiable by the terminology used, such as “plan,” “expect,” “estimate,” “budget” or other similar words.

The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. SMUD does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations or events, conditions or circumstances on which such statements are based occur.

This Official Statement, including any supplement or amendment hereto, is intended to be deposited with the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access website. SMUD maintains a website. However, the information presented therein is not part of this Official Statement and should not be relied upon in making investment decisions with respect to the 2023 Series K Bonds. The references to internet websites in this Official Statement are shown for reference and convenience only; unless explicitly stated to the contrary, the information contained within the websites is not incorporated herein by reference and does not constitute part of this Official Statement.

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OFFICIAL STATEMENT
Relating to
SACRAMENTO MUNICIPAL UTILITY DISTRICT
§[PRINCIPAL AMOUNT]*
ELECTRIC REVENUE REFUNDING BONDS, 2023 SERIES K
INTRODUCTION

This Official Statement, including the cover page and Appendices attached hereto, describes the Sacramento Municipal Utility District (“SMUD”), a political subdivision of the State of California (the “State”), and its §[PRINCIPAL AMOUNT]* Electric Revenue Refunding Bonds, 2023 Series K (the “2023 Series K Bonds”), in connection with the sale by SMUD of the 2023 Series K Bonds. The 2023 Series K Bonds are being issued to (i) refund SMUD’s Electric Revenue Refunding Bonds, 2013 Series B (the “2013B Refunded Bonds”), and (ii) pay certain costs associated with the issuance of the 2023 Series K Bonds. See “PLAN OF FINANCE.”

The 2023 Series K Bonds are part of an Electric Revenue Bond authorization of SMUD and are issued pursuant to Resolution No. 6649 (the “Master Resolution”) adopted in 1971, as amended and supplemented, and applicable California law, including Article 6a of Chapter 6 of the Municipal Utility District Act (Public Utilities Code Sections 12850 to 12860) (the “Act”), the Revenue Bond Law of 1941 (Government Code Section 54300 *et seq.*) and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (Government Code Section 53580 *et seq.*). The issuance of the 2023 Series K Bonds was authorized on May 18, 2023, by the Board of Directors of SMUD by a Sixty-Sixth Supplemental Resolution (the “Sixty-Sixth Supplemental Resolution”) supplemental to the Master Resolution. The Master Resolution and all supplemental resolutions, including the Sixty-Sixth Supplemental Resolution, are collectively referred to herein as the “Resolution.” See APPENDIX D — “SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION.”

The purchasers of the 2023 Series K Bonds, by virtue of their purchase of the 2023 Series K Bonds, will consent to certain amendments to the Resolution. See “SECURITY FOR THE BONDS – Consent to Amendments to the Resolution.”

The 2023 Series K Bonds and other bonds issued on a parity therewith pursuant to the Resolution are collectively referred to herein as the “Bonds.” The Bonds, together with other Parity Bonds, are payable solely from the Net Revenues of the Electric System. See “SECURITY FOR THE BONDS.” As of May 1, 2023, Bonds in the aggregate principal amount of \$1,841,715,000 were outstanding under the Resolution. Immediately following the issuance of the 2023 Series K Bonds and the refunding of the 2013B Refunded Bonds, Bonds in the aggregate principal amount of \$[_____]* will be outstanding under the Resolution.

Although the Resolution establishes an “Electric Revenue Bond Reserve Fund” (the “Reserve Fund”), the Reserve Fund does *not* secure and will *not* be available to pay debt service on the 2023 Series K Bonds. The Reserve Fund secures all Bonds issued prior to January 1, 2004 that are currently outstanding (and not otherwise deemed to be paid and discharged under the Resolution) and may secure additional Bonds issued in the future.

* Preliminary, subject to change.

U.S. Bank Trust Company, National Association serves as trustee and paying agent under the Resolution (the “Trustee”).

The issuance of the 2023 Series K Bonds and the refunding of the 2013B Refunded Bonds is a component of a plan of finance (the “Plan of Finance”) that includes the issuance of SMUD’s Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “2023C Subordinated Bonds”) to refund SMUD’s Electric Revenue Refunding Bonds, 2013 Series A (the “2013A Refunded Bonds”), the issuance of SMUD’s Subordinated Electric Revenue Bonds, 2023 Series D and 2023 Series E (the “2023D Subordinated Bonds” and “2023E Subordinated Bonds,” respectively), to finance and refinance certain improvements and additions to SMUD’s Electric System, including through the refunding of SMUD’s commercial paper notes, and the issuance of SMUD’s Subordinated Electric Revenue Refunding Bonds, 2023 Series F (the “2023F Subordinated Bonds”) to refund SMUD’s Subordinated Electric Revenue Bonds, 2019 Series A (the “2019A Subordinated Refunded Bonds”). The issuance of the 2023 Series K Bonds to refund the 2013B Refunded Bonds is not contingent upon the implementation of the other components of the Plan of Finance, and SMUD is not obligated to implement any of the components of the Plan of Finance. Upon the issuance of the 2023 Series K Bonds and the refunding of the 2013B Refunded Bonds, Senior Bonds in the aggregate principal amount of \$[]* will be outstanding. If the Plan of Finance is implemented in whole, upon completion of the Plan of Finance, Senior Bonds in the aggregate principal amount of approximately \$[]* and Subordinated Bonds in the aggregate principal amount of approximately \$[]* are expected to be outstanding. See “PLAN OF FINANCE.”

From time to time, SMUD issues Subordinated Electric Revenue Bonds (the “Subordinated Bonds”) pursuant to Resolution No. 85-11-1 of SMUD, adopted on November 7, 1985, as amended and supplemented (the “Subordinate Resolution”). As of May 1, 2023, Subordinated Bonds (including the 2019A Subordinated Refunded Bonds) in the aggregate principal amount of \$200,000,000 were outstanding. The Subordinated Bonds are payable solely from the Net Subordinated Revenues of the Electric System and are subordinate in right of payment to the prior payment of principal of and interest on the Bonds (including the 2023 Series K Bonds). SMUD expects to refund all of the 2019A Subordinated Refunded Bonds, currently outstanding in the principal amount of \$100,000,000 with proceeds of the 2023F Subordinated Bonds. See “PLAN OF FINANCE.”

SMUD also issues commercial paper notes (the “Notes”) from time to time. As of May 1, 2023, Notes in the principal amount of \$200,000,000 were outstanding. Currently, Notes in the aggregate principal amount of \$300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD’s obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Bonds (including the 2023 Series K Bonds) and the Subordinated Bonds. Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February and August of 2025. SMUD expects to pay all \$200,000,000 of outstanding principal amount of the Notes with the proceeds of the 2023D Subordinated Bonds and the 2023E Subordinated Bonds. See “PLAN OF FINANCE.”

SMUD has also previously issued its taxable and tax-exempt revolving notes pursuant to a revolving credit agreement with a commercial bank (collectively, the “Revolving Credit Facility”). As of

* Preliminary, subject to change.

May 1, 2023, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to \$100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD's payment obligations under the Revolving Credit Facility are payable solely from available revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Bonds (including the 2023 Series K Bonds) and the Subordinated Bonds. The current term of the Revolving Credit Facility expires in February 2026.

SMUD is responsible for the acquisition, generation, transmission and distribution of electric power to its service area, which includes most of Sacramento County and small portions of Placer and Yolo counties. For the year ended December 31, 2022, SMUD served a population of approximately 1.5 million with a total annual retail load of approximately 10,622 million kilowatt hours ("kWh"). SMUD owns and operates an electric system which, as of March 31, 2023, included generating facilities owned and operated by SMUD with an aggregate generating capacity of approximately 783 megawatts ("MW"), local gas-fired plants owned and operated by a joint powers authority and managed by SMUD with an aggregate generating capacity of approximately 1,081 MW, over which SMUD has exclusive control of dispatch, and purchased power with an aggregate generating capacity of approximately 1,314 MW and transmission and distribution facilities. SMUD's power requirements exceed its generating capacity and thus SMUD has agreements with others (including the Local Gas-Fired Plants as defined in APPENDIX A) for the purchase of a portion of its power requirements. See APPENDIX A – "INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – POWER SUPPLY AND TRANSMISSION – Power Supply Resources." Continuing development of SMUD's business strategy in response to changing environmental and regulatory requirements has had, and is expected to continue to have, a major effect on SMUD's power supply planning. See APPENDIX A – "INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – BUSINESS STRATEGY."

Pursuant to a Continuing Disclosure Agreement, dated the date of issuance of the 2023 Series K Bonds (the "Continuing Disclosure Agreement") between SMUD and the Trustee, SMUD will covenant for the benefit for the holders of the 2023 Series K Bonds and owners of beneficial interest in the 2023 Series K Bonds to provide certain financial information and operating data and to provide certain notices. See "CONTINUING DISCLOSURE UNDERTAKING" and APPENDIX F – "FORM OF CONTINUING DISCLOSURE AGREEMENT."

The information presented in this Introduction is qualified in its entirety by reference to this entire Official Statement and the documents summarized or described herein. This Official Statement, including the Appendices, summarizes the terms of the 2023 Series K Bonds, the Resolution and certain agreements, contracts and other arrangements, some of which currently exist and others of which may exist in the future. The summaries of and references to all documents, statutes, regulations and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary and reference is qualified in its entirety by reference to each such document, statute, regulation or instrument.

Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in APPENDIX D – "SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION – Certain Definitions" or in the Resolution.

PLAN OF FINANCE

The proceeds of the 2023 Series K Bonds will be used to (i) refund 2013B Refunded Bonds, outstanding in the principal amount of \$75,680,000, and (ii) pay certain costs associated with the issuance

of the 2023 Series K Bonds. The issuance of the 2023 Series K Bonds to refund the 2013B Refunded Bonds is a component of the Plan of Finance, as further described below. The issuance of the 2023 Series K Bonds to refund the 2013B Senior Bonds is not contingent upon the implementation of the other components of the Plan of Finance, and SMUD is not obligated to implement any of the components of the Plan of Finance.

Refunding of 2013B Refunded Bonds

A portion of the proceeds of the 2023 Series K Bonds, together with other available funds, will be deposited in trust in an escrow fund (the “2013B Escrow Fund”) established under an escrow agreement between SMUD and the Trustee. The moneys so deposited will be invested in direct obligations of the United States of America (the “Federal Securities”), the interest on and principal of which will be sufficient to pay the interest on the 2013B Refunded Bonds due on August 15, 2023 (the “2013B Redemption Date”) and to redeem the 2013B Refunded Bonds on the 2013B Redemption Date. Upon deposit, all liability of SMUD with respect to the 2013B Refunded Bonds (except for the obligation of SMUD to pay the interest on and redemption price of the 2013B Refunded Bonds from moneys on deposit in the 2013B Escrow Fund) will cease. The holders of the 2013B Refunded Bonds will be entitled to payment from SMUD solely from moneys or Federal Securities on deposit in the 2013B Escrow Fund, and the 2013B Refunded Bonds will no longer be outstanding under the Resolution. The Federal Securities and moneys in the 2013B Escrow Fund will not secure the 2023 Series K Bonds and will not be available to pay the principal of or interest on the 2023 Series K Bonds.

In connection with the refunding of the 2013B Refunded Bonds, SMUD expects to terminate a forward starting interest rate swap agreement that was executed in June 2020 to hedge potential interest rate exposure relating to the future refunding of the 2013B Refunded Bonds. SMUD expects that it will receive a termination payment for the termination of the interest rate swap agreement. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Interest Rate Swap Agreements.*”

Issuance of 2023C Subordinated Bonds and Refunding of 2013A Refunded Bonds

[Concurrently with the issuance of the 2023 Series K Bonds], SMUD expects to issue approximately \$132,020,000 in principal amount of the 2023C Subordinated Bonds. The 2023C Subordinated Bonds are expected to be issued as variable rate demand bonds bearing interest at daily rates, and supported by a liquidity facility in the form of a standby bond purchase agreement with TD Bank, N.A. The proceeds of the 2023C Subordinated Bonds are expected to be used to refund the 2013A Refunded Bonds. A portion of the proceeds of the 2023K Senior Bonds, together with other available funds, will be deposited in trust in an escrow fund (the “2013A Escrow Fund”) established under an escrow agreement between SMUD and the Trustee, in an amount sufficient to pay the interest on the 2013A Refunded Bonds due on August 15, 2023 (the “2013A Redemption Date”) and to redeem the 2013A Refunded Bonds on the 2013A Redemption Date. The moneys so deposited will be invested in direct obligations of the United States of America. The moneys and securities in the 2013A Escrow Fund will not secure the 2023 Series K Bonds and will not be available to pay the principal of or interest on the 2023 Series K Bonds.

In June 2020, SMUD had entered into a forward starting interest rate swap agreement to hedge potential interest rate exposure relating to the future refunding of the 2013A Refunded Bonds. The swap will become effective on July 12, 2023. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Interest Rate Swap Agreements.*”

Issuance of 2023D Subordinated Bonds and 2023E Subordinated Bonds

[Concurrently with the issuance of the 2023C Subordinated Bonds], SMUD expects to issue the 2023D Subordinated Bonds and the 2023E Subordinated Bonds in the approximate principal amounts of \$[_____] and \$[_____] , respectively. The proceeds of the 2023D Subordinated Bonds and the 2023E Subordinated Bonds are expected to be used to finance and refinance certain improvements and additions to SMUD’s Electric System, including through the refunding of Notes in the outstanding principal amount of \$200,000,000*. The 2023D Subordinated Bonds and the 2023E Subordinated Bonds are each expected to be issued in a term rate mode, bearing fixed rates during the initial term rate periods of [] years and [] years, respectively.

Issuance of 2023F Subordinated Bonds and Refunding of 2019A Refunded Subordinated Bonds

[Concurrently with the issuance of the 2023C Subordinated Bonds,] SMUD also expects to issue the 2023F Subordinated Bonds in the principal amount of \$100,000,000* to redeem the 2019A Refunded Subordinated Bonds on the date of delivery of the 2023F Subordinated Bonds. The 2023F Subordinated Bonds are expected to be issued in a term rate mode, bearing a fixed rate during the initial term rate period of [five] years.

ESTIMATED SOURCES AND USES OF FUNDS

The estimated sources and uses of funds with respect to the 2023 Series K Bonds are as follows:

Sources of Funds:

Principal Amount	\$
[Net] Original Issue [Premium/Discount]	
Interest Fund Release	
Interest Rate Swap Termination Payment	
SMUD Contribution	
Total Sources of Funds	\$

Uses of Funds:

Deposit to 2013B Escrow Fund for 2013B Refunded Bonds	\$
Costs of Issuance (including Underwriters’ Discount)	
Total Uses of Funds	\$

THE 2023 SERIES K BONDS

The 2023 Series K Bonds will mature in the years and amounts and bear interest at the rates set forth on the inside cover page hereof. Interest on the 2023 Series K Bonds will accrue from the date of delivery of the 2023 Series K Bonds, and will be payable on [August] 15, 20[23], and semiannually thereafter on each February 15 and August 15 (each, an “Interest Payment Date”) to the owners thereof as of the first day of the month (whether or not such day is a Business Day) in which an Interest Payment Date occurs (each, a “Record Date”).

The 2023 Series K Bonds will be issued in fully registered form and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New

* Preliminary, subject to change.

York (“DTC”). DTC will act as securities depository (the “Securities Depository”) for the 2023 Series K Bonds. Individual purchases of interests in the 2023 Series K Bonds will be made in book-entry form only, in the principal amount of \$5,000 or any integral multiple thereof. Purchasers of such interests will not receive certificates representing their interests in the 2023 Series K Bonds. Principal and interest are payable directly to the Securities Depository by the Trustee. Upon receipt of payments of principal and interest, the Securities Depository will in turn remit such principal and interest to the Securities Depository’s Direct Participants (as such term is hereinafter defined) for subsequent disbursement to the purchasers of interests in the 2023 Series K Bonds. See APPENDIX C – “BOOK-ENTRY SYSTEM.”

[The 2023 Series K Bonds are not subject to redemption prior to maturity.]

DEBT SERVICE SCHEDULE

The following table sets forth the debt service requirements with respect to the 2023 Series K Bonds. See also APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Debt Service Requirements.*”

Calendar Year	Principal	Interest	Total
	\$	\$	\$
	\$	\$	\$

SECURITY FOR THE BONDS

General

The principal of and premium, if any, and interest on the Bonds, together with other Parity Bonds, are payable exclusively from, and are secured by a pledge (effected in the manner and to the extent provided in the Resolution) of, the Net Revenues of the Electric System of SMUD.

Neither the credit nor the taxing power of SMUD is pledged to the payment of the Bonds and the general fund of SMUD is not liable for the payment thereof. The owners of the Bonds cannot compel the exercise of any taxing power of SMUD or the forfeiture of any of its property. The Bonds are not a legal or equitable pledge, charge, lien or encumbrance upon any of SMUD’s property (including the Electric System) or upon any of its income, receipts or revenues except the Net Revenues of the Electric System to the extent of the pledge thereof contained in the Resolution.

Consent to Amendments to the Resolution

The purchasers of the 2023 Series K Bonds, by virtue of their purchase of the 2023 Series K Bonds, will consent to certain amendments to the Resolution (the “Proposed Amendments”). Such amendments are described in *bold italic* font herein under “SECURITY FOR THE BONDS – Rates and Charges” and “ – Limitations on Additional Obligations Payable from Revenues” and in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION – Certain Definitions” and “ – Reserve Fund for Certain Bonds.” The written consents to the Proposed Amendments of the holders and registered owners of at least 60% of the Bonds outstanding have been filed with SMUD or the Trustee, as required by the Resolution. However, while certain Bonds remain outstanding, SMUD must also obtain the written consents of certain bond insurers to implement the Proposed Amendments. SMUD expects to implement the Proposed Amendments when the written consents of such bond insurers are obtained or when the Bonds insured by such bond insurers are no longer outstanding. The final maturity date of the insured Bonds is July 1, 2024.

Allocation of Revenues

After making an allocation of Revenues to Maintenance and Operation Costs and to Energy Payments not included in Maintenance and Operation Costs, the Treasurer of SMUD is required (subject to the last paragraph of this section) to set aside, on an equal priority with sums set aside for all other Parity Bonds, Net Revenues as follows:

First: To the Electric Revenue Bond Interest Fund, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-fifth (1/5) of the aggregate amount of interest becoming due on the Bonds on the next succeeding semiannual interest payment date, until an amount sufficient to meet said interest payment is accumulated.

Second: To the Electric Revenue Bond Redemption Fund, to be set aside in the Principal Account and Sinking Fund, respectively, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-tenth (1/10) of the aggregate amount of principal becoming due on serial Bonds and the aggregate minimum sinking fund payments required to be made with respect to term Bonds during the next ensuing 12 months, until an amount sufficient to meet the principal and sinking fund requirements on all Bonds outstanding is accumulated in said accounts, respectively.

Third: To the Electric Revenue Bond Reserve Fund, such amounts as any supplemental resolution authorizing the issuance of a series of Bonds may require to build up and maintain said fund.

If interest on Bonds of a series or maturity is payable more frequently than semiannually, the Treasurer of SMUD shall set aside out of Net Revenues in the Interest Fund such amounts as may be required to pay interest on the Bonds of such series or maturity on each interest payment date at least one month prior to such interest payment date. Allocation to the Electric Revenue Bond Redemption Fund and Electric Revenue Bond Reserve Fund shall be made as set forth above.

All remaining Revenues, after making the foregoing allocations, will be available to SMUD for all lawful SMUD purposes.

From time to time, SMUD may deposit in the Rate Stabilization Fund from such remaining Revenues such amounts as SMUD shall determine, provided that deposits in the Rate Stabilization Fund from remaining Revenues in any fiscal year may be made until (but not after) the date 120 days after the end of such fiscal year. SMUD may withdraw amounts from the Rate Stabilization Fund only for inclusion in Revenues for any fiscal year, such withdrawals to be made until (but not after) 120 days after the end of such fiscal year. All interest or other earnings upon deposits in the Rate Stabilization Fund shall be withdrawn therefrom and accounted for as Revenues. No deposit of Revenues to the Rate Stabilization Fund may be made to the extent such Revenues were included in any certificate submitted in connection with the issuance of additional bonds and withdrawal of the Revenues from the Revenues employed in rendering said certificate would have caused noncompliance with the additional bond provisions or to the extent withdrawals of the Revenues for any fiscal year would have reduced the debt service ratio for such fiscal year to or below 1.40:1.00. See APPENDIX A – “RATES AND CUSTOMER BASE – Rates and Charges” for a description of the balance in the Rate Stabilization Fund.

With respect to Bonds of a series issued on or after October 1, 2003 (including the 2023 Series K Bonds), notwithstanding the foregoing, so long as the Bonds of such series or maturity are outstanding, the supplemental resolution authorizing the issuance of such series shall require the Treasurer, out of Net Revenues received by SMUD, to set aside in the Interest Fund and the Principal Account, respectively, such amounts as may be required so that an amount equal to the amount of principal and/or interest becoming due and payable on the Bonds of such series or maturity on each interest payment date and principal payment date is on deposit in the Interest Fund and the Principal Account, respectively, at such time on or prior to such interest payment date or principal payment date as shall be specified in the supplemental resolution authorizing such Bonds.

Rates and Charges

SMUD has covenanted in the Resolution to establish and at all times maintain and collect rates and charges for the sale or use of electric energy generated, transmitted, distributed or furnished by SMUD which, together with certain items of other income permitted under the Resolution, will yield Revenues at least sufficient, with respect to the ensuing 12 months, to pay and provide for all sums required for Maintenance and Operation Costs and Energy Payments not included in Maintenance and Operation Costs and, in addition, to provide an aggregate sum equal to at least 1.20 times the total amount required for the payment of principal and interest, together with any sinking fund or reserve fund payments, on the Bonds and all Parity Bonds, in each case during such 12 months.

For purposes of the calculations of payments to be made pursuant to the Resolution, the interest rates on Parity Bonds which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds bear a rate or rates of interest for a known period or periods of time, such rate or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

For purposes of the above calculations of principal of and interest on Parity Bonds, if a Financial Products Agreement has been entered into by SMUD with respect to any Parity Bonds, interest on such Parity Bonds shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds in such fiscal year or period at the rate or rates stated in such Parity Bonds plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

For purposes of the above calculations of principal of and interest on Parity Bonds, Excluded Principal Payments shall be disregarded (but interest on the Parity Bonds to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Bonds are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included; and for purposes of the above calculations of interest on Parity Bonds, the interest rates on Parity Bonds which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds bear a rate or rates of interest for a known period or periods of time, such rate or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

SMUD has full power to establish rates and charges for all SMUD services, and the levels of such rates are not subject to review or regulation by any other governmental agency, either federal or state.

For purposes of the calculations specified in this section: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that SMUD receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by SMUD with respect to or in connection with such Parity Bonds during such period of time.

See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Build America Bonds Subsidy Payments*” for a description of the current Subsidy that SMUD receives with respect to certain Bonds.

See APPENDIX D hereto for the definitions of certain capitalized terms used in this section.

Limitations on Additional Obligations Payable from Revenues

The Resolution provides that SMUD will not, so long as any Bonds are outstanding, issue any obligations payable in whole or in part from Revenues except the following:

1. Refunding bonds issued solely to refund all or part of the Bonds or Parity Bonds;
2. General obligation bonds or other securities secured by the full faith and credit of SMUD;
3. Additional revenue bonds (including additional Bonds under the Resolution and additional Parity Bonds), payable on a parity with the Bonds, with an equal lien and charge upon the Revenues, but only subject to the following conditions:
 - (a) Such additional revenue bonds shall have been authorized for and the proceeds therefrom required to be applied to additions, betterments, extensions or improvements to the Electric System (and necessary costs of issuance, interest during construction and reserve funds);
 - (b) The proceedings for the issuance of such additional revenue bonds shall require SMUD to fix and collect rates and charges in an amount not less, with respect to such bonds, than the amounts required with respect to Bonds issued under the Resolution;
 - (c) SMUD shall not then be in default under the Resolution or other resolutions authorizing the issuance of Parity Bonds; and

(d) The Trustee shall receive a certificate of SMUD to the effect (i) that Net Revenues, after completion of the improvements proposed to be financed by such additional revenue bonds, will be sufficient to pay the principal of and interest (and bond reserve fund requirements) on all Bonds and Parity Bonds then outstanding and on such additional revenue bonds; and (ii) that for a period of 12 consecutive months during the 24 months immediately preceding the issuance of the additional revenue bonds the Net Revenues have been at least equal to 1.25 times maximum annual debt service on all Bonds and Parity Bonds then outstanding and on such additional revenue bonds (after adjusting Net Revenues to include 75 percent of the estimated additional Net Revenues to be derived from an increase in rates and charges or from the acquisition of an existing revenue producing electric system); and

4. Revenue bonds junior and subordinate to the Bonds and Parity Bonds.

For purposes of the above calculations, Excluded Principal Payments shall be disregarded (but interest on the Parity Bonds to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Bonds are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included; and for purposes of the above calculations of interest on Parity Bonds, the interest rates on Parity Bonds which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds bear a rate or rates of interest for a known period or periods of time, such rate or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

For purposes of the above calculations of principal of and interest on Parity Bonds, if a Financial Products Agreement has been entered into by SMUD with respect to any Parity Bonds, interest on such Parity Bonds shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds in such fiscal year or period at the rate or rates stated in such Parity Bonds plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

For purposes of the calculations specified in this section: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that SMUD receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by SMUD with respect to or in connection with such Parity Bonds during such period of time.

See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Estimated Capital Requirements” for a description of SMUD’s projected capital requirements. Such capital requirements may be satisfied through the issuance of additional Bonds or Parity Bonds.

See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Build America Bonds Subsidy Payments*” for a description of the current Subsidy that SMUD receives with respect to certain Bonds.

See APPENDIX D hereto for the definitions of certain capitalized terms used in this section.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SMUD owns and operates an electric system that has provided retail electric service since 1946. SMUD's current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. For a full description of SMUD, its history, organization, operations, and financial performance, certain developments in the energy markets, certain factors affecting the electric utility industry, including impacts from the COVID-19 pandemic, and certain regulatory and other matters, see APPENDIX A – "INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT."

ABSENCE OF LITIGATION REGARDING THE 2023 SERIES K BONDS

SMUD is not aware of any action, suit or proceeding, threatened or pending, to restrain or enjoin the issuance, sale or delivery of the 2023 Series K Bonds, or in any way contesting or affecting the validity of the 2023 Series K Bonds or any of the proceedings of SMUD taken with respect to the 2023 Series K Bonds. SMUD is not aware of any action, suit or proceeding, threatened or pending, questioning the corporate existence of SMUD, or the title of the officers of SMUD to their respective offices, or the power and authority of SMUD to execute and deliver the 2023 Series K Bonds. For a description of certain litigation in which SMUD is involved, see APPENDIX A – "INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – LEGAL PROCEEDINGS."

UNDERWRITING

Barclays Capital Inc. ("Barclays"), as representative of itself [and BofA Securities, Inc. ("BofA") (each, an "Underwriter" and, collectively, the "Underwriters") have jointly and severally agreed, subject to certain customary conditions to closing, to purchase the 2023 Series K Bonds from SMUD at an aggregate purchase price of \$_____ (being the aggregate principal amount of the 2023 Series K Bonds, plus [net] original issue [premium/discount] of \$_____, and less Underwriters' discount of \$_____). The Underwriters will be obligated to purchase all 2023 Series K Bonds if any 2023 Series K Bonds are purchased. The Underwriters have agreed to make a public offering of the 2023 Series K Bonds at the initial offering prices set forth on the inside cover page hereof. The 2023 Series K Bonds may be offered and sold to certain dealers (including underwriters and other dealers depositing such bonds into investment trusts) at prices lower than such public offering prices, and such public offering prices may be changed, from time to time, by the Underwriters.

BofA, an Underwriter, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, BofA may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA may compensate MLPF&S as a dealer for its selling efforts with respect to the 2023 Series K Bonds.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for SMUD for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of, or issued for the benefit of, SMUD.

MUNICIPAL ADVISOR

SMUD has retained PFM Financial Advisors LLC, as Municipal Advisor in connection with various matters relating to the delivery of the 2023 Series K Bonds. The Municipal Advisor assumes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. The Municipal Advisor is an independent advisory firm and is not engaged in underwriting or distribution of securities. The Municipal Advisor will receive compensation that is contingent upon the sale, issuance and delivery of the 2023 Series K Bonds.

SWAP ADVISOR

SMUD has retained Evercrest Advisors, LLC, as Swap Advisor in connection with various matters relating to the termination of the interest rate swap entered into in anticipation of the issuance of the 2023 Series K Bonds. The Swap Advisor assumes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. The Swap Advisor is an independent advisory firm and is not engaged in underwriting or distribution of securities or the trading of interest rate swaps. The Swap Advisor will receive compensation that is contingent upon the sale, issuance and delivery of the 2023 Series K Bonds.

APPROVAL OF LEGAL PROCEEDINGS

The validity of the 2023 Series K Bonds and certain other legal matters are subject to the approval of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. The approving opinion of Bond Counsel will be delivered with the 2023 Series K Bonds in substantially the form appearing in APPENDIX E. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Certain legal matters will be passed on for the Underwriters by Nixon Peabody LLP, San Francisco, California, counsel to the Underwriters.

FINANCIAL STATEMENTS

SMUD's audited, consolidated financial statements for the years ended December 31, 2022 and December 31, 2021 are included in APPENDIX B attached to this Official Statement. These financial statements have been audited by Baker Tilly Virchow Krause, LLP, Madison, Wisconsin (the "Auditor"), for the periods indicated and to the extent set forth in their report thereon and should be read in their entirety. SMUD has not requested nor did it obtain permission from the Auditor to include the audited, consolidated financial statements as an appendix to this Official Statement. Accordingly, the Auditor has not performed any procedures to review the financial condition or operations of SMUD subsequent to the date of its report included therein, nor has it reviewed any information contained in this Official Statement.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD ("Bond Counsel"), based upon an analysis of existing laws, regulations, rulings and court decisions, and

assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2023 Series K Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the “Code”) and is exempt from State of California personal income taxes. Bond Counsel is of the further opinion that interest on the 2023 Series K Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. Bond Counsel observes that, for tax years beginning after December 31, 2022, interest on the 2023 Series K Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on the 2023 Series K Bonds. A complete copy of the proposed form of opinion of Bond Counsel is set forth in APPENDIX E hereto.

[To the extent the issue price of any maturity of the 2023 Series K Bonds is less than the amount to be paid at maturity of such 2023 Series K Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2023 Series K Bonds), the difference constitutes “original issue discount,” the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the 2023 Series K Bonds which is excluded from gross income for federal income tax purposes and exempt from State of California personal income taxes. For this purpose, the issue price of a particular maturity of the 2023 Series K Bonds is the first price at which a substantial amount of such maturity of the 2023 Series K Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2023 Series K Bonds accrues daily over the term to maturity of such 2023 Series K Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2023 Series K Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2023 Series K Bonds. Beneficial Owners of the 2023 Series K Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2023 Series K Bonds with original issue discount, including the treatment of Beneficial Owners who do not purchase such 2023 Series K Bonds in the original offering to the public at the first price at which a substantial amount of such 2023 Series K Bonds is sold to the public.]

2023 Series K Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) (“Premium Bonds”) will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a Beneficial Owner’s basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2023 Series K Bonds. SMUD has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2023 Series K Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the 2023 Series K Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2023 Series K Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not

taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel's attention after the date of issuance of the 2023 Series K Bonds may adversely affect the value of, or the tax status of interest on, the 2023 Series K Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel is of the opinion that interest on the 2023 Series K Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the 2023 Series K Bonds may otherwise affect a Beneficial Owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner's other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2023 Series K Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2023 Series K Bonds. Prospective purchasers of the 2023 Series K Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the 2023 Series K Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of SMUD, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. SMUD has covenanted, however, to comply with the requirements of the Code.

Bond Counsel's engagement with respect to the 2023 Series K Bonds ends with the issuance of the 2023 Series K Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend SMUD or the Beneficial Owners regarding the tax-exempt status of the 2023 Series K Bonds in the event of an audit examination by the IRS. Under current procedures, Beneficial Owners would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which SMUD legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the 2023 Series K Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2023 Series K Bonds, and may cause SMUD or the Beneficial Owners to incur significant expense.

Payments on the 2023 Series K Bonds generally will be subject to U.S. information reporting and possibly to "backup withholding." Under Section 3406 of the Code and applicable U.S. Treasury Regulations issued thereunder, a non-corporate Beneficial Owner of 2023 Series K Bonds may be subject to backup withholding with respect to "reportable payments," which include interest paid on the 2023 Series K Bonds and the gross proceeds of a sale, exchange, redemption, retirement or other disposition of the 2023 Series K Bonds. The payor will be required to deduct and withhold the prescribed amounts if (i) the payee fails to furnish a U.S. taxpayer identification number ("TIN") to the payor in the manner required, (ii) the IRS notifies the payor that the TIN furnished by the payee is incorrect, (iii) there has

been a “notified payee underreporting” described in Section 3406(c) of the Code or (iv) the payee fails to certify under penalty of perjury that the payee is not subject to withholding under Section 3406(a)(1)(C) of the Code. Amounts withheld under the backup withholding rules may be refunded or credited against a Beneficial Owner’s federal income tax liability, if any, provided that the required information is timely furnished to the IRS. Certain Beneficial Owners (including among others, corporations and certain tax-exempt organizations) are not subject to backup withholding. The failure to comply with the backup withholding rules may result in the imposition of penalties by the IRS.

CONTINUING DISCLOSURE UNDERTAKING

Pursuant to the Continuing Disclosure Agreement, SMUD will covenant for the benefit of the holders and the “Beneficial Owners” (as defined in the Continuing Disclosure Agreement) of the 2023 Series K Bonds to provide certain financial information and operating data relating to SMUD by not later than 180 days after the end of each of SMUD’s fiscal years (presently, each December 31), commencing with the report for the year ending December 31, 2023 (the “Annual Report”), and to provide notices of the occurrence of certain listed events with respect to the 2023 Series K Bonds. The Annual Report will be filed by or on behalf of SMUD with the Municipal Securities Rulemaking Board (the “MSRB”) through its Electronic Municipal Market Access system (“EMMA”) and any notices of such listed events will be filed by or on behalf of SMUD with the MSRB through EMMA. The specific nature of the information to be contained in the Annual Report and the notices of listed events are set forth in the form of the Continuing Disclosure Agreement which is included in its entirety in APPENDIX F hereto. SMUD’s covenant will be made in order to assist the Underwriters in complying with Securities and Exchange Commission Rule 15c2-12.

[In a limited number of circumstances, certain of the annual reports, audited financial statements or listed event filings required to be made by SMUD during the last five years under its continuing disclosure undertakings were not connected to all of the CUSIP numbers of the bonds subject to the continuing disclosure undertakings. In addition, SMUD entered into two subordinated forward starting interest rate swaps in June 2020 and filed a notice of the interest rate swaps with the MSRB through EMMA in April 2020. A notice of rating upgrade on October 6, 2020, by Moody’s Investors Service of the Northern California Gas Authority No. 1 Gas Project Revenue Bonds, Series 2007B, was also not filed until October 28, 2020.]

RATINGS

Fitch Ratings, Inc. (“Fitch”) and S&P Global Ratings (“S&P”) have assigned ratings of [“AA (stable outlook)” and “AA (stable outlook)],” respectively, to the 2023 Series K Bonds. Such ratings reflect only the views of such organizations and are not a recommendation to buy, sell or hold the 2023 Series K Bonds. Explanations of the significance of such ratings may be obtained only from the respective rating agencies. SMUD has furnished to Fitch and S&P certain information and materials concerning the 2023 Series K Bonds and itself. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that such ratings will continue for any given period or that they will not be revised downward, suspended or withdrawn entirely by the respective rating agencies, if in the judgment of such rating agency, circumstances so warrant. SMUD has not, other than as described under “CONTINUING DISCLOSURE UNDERTAKING” above, and the Underwriters have not undertaken any responsibility either to bring to the attention of the holders or beneficial owners of the 2023 Series K Bonds any proposed revision, suspension or withdrawal of any rating on the 2023 Series K Bonds or to oppose any such proposed revision, suspension or withdrawal. Any such downward revision, suspension or withdrawal of such ratings may have an adverse effect on the market price or marketability of the 2023 Series K Bonds.

VERIFICATION

Upon delivery of the 2023 Series K Bonds, [_____] (the “Verification Agent”) will verify, from the information provided to it, the mathematical accuracy as of the date of the closing of the 2023 Series K Bonds of the computations contained in the provided schedules to determine that the anticipated receipts from the securities and cash deposits listed in the Underwriters’ schedules, to be held in escrow, will be sufficient to pay, when due, the interest on and redemption requirements of the 2013B Refunded Bonds. The Verification Agent will express no opinion on the assumptions provided to them.

MISCELLANEOUS

This Official Statement includes descriptions of the terms of the 2023 Series K Bonds, power purchase agreements with certain other parties, pooling and other agreements, the Resolution and certain provisions of the Act. Such descriptions do not purport to be complete, and all such descriptions and references thereto are qualified in their entirety by reference to each such document.

Copies of the Resolution, which forms a contract with the Holders of the 2023 Series K Bonds, will be made available upon request.

This Official Statement has been duly authorized by the Board of Directors of SMUD.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Chief Executive Officer and General Manager

APPENDIX A

**INFORMATION REGARDING
SACRAMENTO MUNICIPAL UTILITY DISTRICT**

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SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS

Heidi Sanborn, President
Rosanna Herber, Vice President
Brandon Rose
Nancy Bui-Thompson
Gregg Fishman
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Frankie McDermott, Chief Operating Officer
Jennifer Davidson, Chief Financial Officer
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Lora Anguay, Chief Zero Carbon Officer
Farres Everly, Chief Marketing & Communications Officer
Russell Mills, Treasurer
Lisa Limcaco, Controller

INTRODUCTION

General

The Sacramento Municipal Utility District (“SMUD”) owns and operates an electric system that has provided retail electric service since 1946. SMUD’s current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. See “THE SERVICE AREA AND ELECTRIC SYSTEM – The Service Area.”

Independent Governance

SMUD is an independently run community-owned organization. SMUD is not required by law to transfer any portion of its collections from customers to any local government.

SMUD is governed by a Board of Directors (the “Board”), which consists of seven directors elected by ward for staggered four-year terms. The Board determines policy and appoints the Chief Executive Officer and General Manager, who is responsible for SMUD’s overall management and day-to-day operations. The Chief Executive Officer and General Manager is responsible for the hiring and removal of all employees, other than the Chief Legal and Government Affairs Officer and General Counsel, the Internal Auditor and the Special Assistant to the Board, who are hired and may be removed only by the Board. The employment status of nearly all SMUD employees is governed by a civil service system administered by the Chief Executive Officer and General Manager.

The Board elects its President and Vice President annually to take office in January. The current members of the Board are as follows:

Name	Occupation	Ward	Term Expires
Brandon Rose.....	Air Pollution Specialist, California Environmental Protection Agency	Ward 1	December 31, 2024
Nancy Bui-Thompson.....	Chief Information Officer, Wellspace Health	Ward 2	December 31, 2024
Gregg Fishman	Communications Specialist	Ward 3	December 31, 2026
Rosanna Herber, Vice-President...	Retired Utility Director	Ward 4	December 31, 2026
Rob Kerth	Business Owner	Ward 5	December 31, 2024
Dave Tamayo.....	Retired Environmental Specialist	Ward 6	December 31, 2026
Heidi Sanborn, President	Executive Director, National Stewardship Action Council	Ward 7	December 31, 2026

SMUD’s senior management consists of the following executives:

Chief Executive Officer & General Manager. Paul Lau was named chief executive officer and general manager (“CEO & GM”) of SMUD in October 2020. He reports to the SMUD Board of Directors. As CEO & GM, he leads the sixth largest community-owned electric utility in the nation, serving a population of approximately 1.5 million residents and managing a \$2.1 billion budget. Mr. Lau previously served as SMUD’s Chief Grid Strategy & Operations Officer and has held several other executive leadership positions during his 41-year career at SMUD. He serves on several national and local boards, including the Large Public Power Council, California Municipal Utilities Association, American Public Power Association, and Smart Electric Power Alliance, and as a Commissioner of the Balancing Authority of Northern California (“BANC”). A registered professional electrical engineer in the State of California

(the “State”), Mr. Lau received his bachelor’s degree in electrical power engineering from California State University, Sacramento.

Chief Customer Officer. Brandy Bolden reports to the CEO & GM and oversees SMUD’s Customer and Community Services business unit. She is responsible for customer experience delivery across our residential and commercial customer segments. She provides leadership and oversight of customer operations including customer care and revenue management, business intelligence, strategic account management, customer experience and segmentation strategy, channel management, customer program and service delivery, and special assistance. She is also responsible for commercial development and business attraction and oversees Community Energy Services, which provides services and support for community choice aggregators. Since joining SMUD in 2003, Brandy has demonstrated strong leadership and held a variety of senior leadership roles, including leading the Customer & Community Services project management office and the dual role of director of Customer Care and Revenue Operations. Ms. Bolden led the team responsible for implementing time-of-day rates, streamlining the meter-to-cash processes, delivering key billing and payment experience enhancements and recognizing operational efficiencies that resulted in sustained annual savings for SMUD. Ms. Bolden holds a Bachelor of Arts in Sociology from University of California, Davis.

Chief Information Officer. Suresh Kotha reports to the CEO & GM and is responsible for SMUD’s information technology strategy, operations, infrastructure, IT Project Management Office, enterprise innovation process, and cybersecurity. More recently, Mr. Kotha has been leading many technology efforts that are integral to developing a grid of the future that will help us achieve our zero-carbon goal, including our Advanced Distribution Management System, the software platform that supports the full suite of distribution management and optimization, and next-generation network upgrades. Mr. Kotha joined SMUD in 2002 as a principal technical developer, with responsibility for designing and leading implementation and upgrades of multiple technology systems, including the SAP software platform and our meter-to-cash systems. He holds a Master of Technology in Computer Science from Jawaharlal Nehru Technology University and a Bachelor of Engineering in Electronics & Communications Engineering from Gulbarga University.

Chief Diversity Officer. Jose Bodipo-Memba reports to the CEO & GM and is responsible for human resources, workforce diversity and inclusion, workforce business planning and SMUD’s Sustainable Communities program. Mr. Bodipo-Memba joined SMUD in 2010 as an environmental specialist and became manager of Environmental Services in 2016. He most recently served as SMUD’s first director of Sustainable Communities. Mr. Bodipo-Memba holds a Bachelor of Arts degree in history from University of California, Berkley and Masters of Business Administration from Drexel University.

Chief Strategy Officer. Scott Martin reports to the CEO & GM and is responsible for looking holistically at all strategies across the company and driving prioritization including zero carbon, rates and pricing, enterprise strategic planning and enterprise prioritization. Mr. Martin is a seasoned executive with more than 30 years of experience. Prior to assuming this role, Mr. Martin was a director for resource planning and new business strategy. Previous experience also includes customer strategy planning supervisor. Mr. Martin joined SMUD in 1999 and holds a Bachelor of Arts degree in economics from the University of California, Berkeley and a master of arts degree in economics from the University of Nevada, Las Vegas.

Chief Legal & Government Affairs Officer and General Counsel. Laura Lewis was named general counsel for SMUD in April 2014. In this position she serves as chief lawyer and manages SMUD’s legal office and its staff of eight attorneys. She also serves as the secretary to SMUD’s elected board of directors. She reports to the Board and to the CEO & GM and has responsibility for all legal matters in which SMUD is a party to, or has an interest in. Ms. Lewis also oversees SMUD’s government affairs and

reliability compliance department. In this capacity, she is responsible for management and coordination of all legislative matters and regulatory requirements affecting SMUD at the state and federal level, including the FERC-NERC electric reliability standards. Ms. Lewis joined SMUD in 1997 as a staff attorney, serving in that capacity through 1999, after which she moved to the San Francisco law firm Davis Wright Tremaine. In 2002, she returned to SMUD as a senior attorney. In 2010, she became assistant general counsel and in 2013 was appointed chief assistant general counsel. She holds a juris doctorate from McGeorge School of Law, where she won membership in the Order of the Coif honor society. She holds a bachelor's degree in political science from the University of California, San Diego and is a member of the American Bar Association, the Energy Bar Association, and the State Bar of California.

Chief Operating Officer. Frankie McDermott reports to the CEO & GM and is responsible for providing strategic leadership and tactical oversight related to the safe and reliable transmission and delivery of energy to customers, ensuring efficient planning, construction, operation and maintenance of transmission, and distribution facilities. This position has primary responsibility for the processes and functions related to system reliability and operations across SMUD. The Chief Operating Officer is also the safety leader for the enterprise, leader of operational efficiency and responsible for all non-IT capital investments. Prior to this role, Mr. McDermott served as Chief Energy Delivery Officer and Chief Customer Officer, responsible for SMUD's overall retail strategy. From 2010 to 2014, he served as customer services director, which included managing relationships with customer segments as SMUD moved forward with smart-grid technologies. Prior to that, he served as manager of enterprise performance and held positions in supply chain and in general services. Before joining SMUD in 2003, Mr. McDermott served in management roles in the semiconductor industry at NEC Electronics in Roseville, California and in Ireland. After engineering school in Ireland, he earned an MBA from Golden Gate University and completed the Advanced Management Program at the Haas School of Business at the University of California Berkeley.

Chief Zero Carbon Officer. Lora Anguay reports to the CEO & GM and is responsible for leadership oversight of SMUD's Energy Supply which includes Energy Trading and Contracts and SMUD's Power Generation Assets. This role is also responsible for the delivery of SMUD's plan to provide 100% carbon free energy resources by 2030. This includes obtaining new grants and partnerships, overseeing research and development, designing distributed energy resource programs, enabling processes to settle distributed energy transactions with SMUD's customers and transitioning SMUD's power generation assets and energy contracts to zero carbon resources. Prior to assuming this role, Ms. Anguay was the director of Distribution Operations & Maintenance and was responsible for the day-to-day operations of SMUD's electric distribution grid. Before that she was an engineering designer, process control supervisor, project manager for smart meter deployment, a senior project manager for smart grid distribution automation and supervisor in Grid Assets. Before SMUD, she worked for Oracle Corporation as a finance manager and is a veteran who served in the United States Coast Guard. Ms. Anguay joined SMUD in 2004 and holds a Bachelor of Science degree in business administration from California State University, Sacramento.

Chief Financial Officer. Jennifer Davidson reports to the CEO & GM and is responsible for corporate accounting, procurement, treasury operations, risk management, and planning and budgets functions as well as key corporate services, including facilities, security, emergency operations and warehouse and fleet. Ms. Davidson joined SMUD in 2006 and previously served as director of budget, enterprise performance and risk management. Before joining SMUD, Ms. Davidson held management positions with investor-owned utility Southern California Edison and software and services provider Amdocs. She holds a bachelor's degree in geography from the University of California, Los Angeles.

Chief Marketing & Communications Officer. Farres Everly reports to the CEO & GM and since 2009 has been responsible for oversight of the SMUD brand, all external and internal strategic marketing and communications activities and campaigns and SMUD's outreach efforts to the community and the

State's capital region, including volunteerism, events and sponsorships. He previously served as the Director Marketing and Communications. Prior to joining SMUD, Mr. Everly held marketing leadership positions at VSP Vision Care, The Money Store and the Sacramento Metropolitan Chamber of Commerce. He holds a bachelor's degree in Journalism from California State University, Chico.

Treasurer. Russell Mills reports to the CFO. He oversees all treasury operations, including debt and cash management, banking, financial planning and forecasting, enterprise and commodity risk management, property and casualty insurance, and is responsible for developing and implementing capital borrowing strategies. Mr. Mills also serves as treasurer for the Transmission Agency of Northern California ("TANC"), the Central Valley Financing Authority ("CVFA"), the Sacramento Cogeneration Authority ("SCA"), the Sacramento Municipal Utility District Financing Authority ("SFA"), the Sacramento Power Authority ("SPA"), the Northern California Gas Authority No. 1 ("NCGA"), the Northern California Energy Authority ("NCEA") and BANC. Before joining SMUD in 2018 as Treasurer, Mr. Mills served as Chief Financial Officer of Southern California Public Power Authority. He also served as the Chief Financial Officer of the Power Supply Program at the California Department of Water Resources. He holds an MBA from Loyola Marymount University, and a bachelor's degree in economics from Towson University in Baltimore, Maryland. Mr. Mills also holds the Energy Risk Professional (ERP) designation and is a CFA level II candidate.

Controller. Lisa Limcaco reports to the CFO and is responsible for accounting and financial reporting at SMUD. Prior to her appointment as controller in 2020, Ms. Limcaco served as an assistant controller, manager of customer value, performance and projects, senior energy commodity specialist and as principal accountant for SMUD's joint powers authorities. Ms. Limcaco also serves as controller for TANC, CVFA, SCA, SFA, SPA, NCGA, NCEA and BANC. Before joining SMUD in 2010 as a senior accountant, Ms. Limcaco had 12-years' experience as the Director of Accounting and controller for a food service provider in Sacramento and over 13-years' experience in public accounting including audit manager at Price Waterhouse LLP. Ms. Limcaco holds a bachelor's degree in accounting from the University of Hawaii, a Master of Business Administration from Sacramento State University and is a Certified Public Accountant in the State.

THE SERVICE AREA AND ELECTRIC SYSTEM

The Service Area

SMUD is the primary distributor of electric power within an area of approximately 900 square miles in central California. The service area includes the State Capital, Sacramento, the populous areas principally to the northeast and south of the City of Sacramento (the "City" or "Sacramento") and the agricultural areas to the north and south. The City is located 85 miles northeast of San Francisco.

SMUD's electric system supplies power to a population of approximately 1.5 million with a total annual retail load of approximately 10,622 million kilowatt-hours ("kWh") for the year ended December 31, 2022. As the capital of the nation's most populous state, Sacramento benefits from the historically stabilizing influence of a large government sector. Sacramento is home to the State government headquarters, the Sacramento County seat, the City government and various special districts that combine to make government the largest single employment sector in the Sacramento area. Information technology, transportation, education and health services, leisure and hospitality, and construction round out the other major sectors of employment and industry in the area.

SMUD's annual peak load has averaged 3,113 Megawatts ("MW") over the last three years, with SMUD's record peak load of 3,299 MW occurring on July 24, 2006. In 2022, SMUD recorded its second highest peak load of 3,292 MW. SMUD reviews its load forecast, at a minimum, on an annual basis.

The Electric System

SMUD owns and operates an integrated electric system that includes generation, transmission and distribution facilities.

SMUD supplies power to its bulk power substations through a 230 kilovolt (“kV”) and 115 kV transmission system. This system transmits power from SMUD’s generation plants and interconnects with Pacific Gas & Electric (“PG&E”) and the Western Area Power Administration (“WAPA”). Power is distributed throughout Sacramento County via a 69 kV sub-transmission system with the exception of the City’s downtown area, which is served from the 115 kV transmission system. The downtown area is served from 115/12 kV and 115/21 kV substations. The distribution system serving the remainder of SMUD’s service territory is comprised of 69/12 kV substations with overhead and underground 12 kV distribution circuits.

BUSINESS STRATEGY

General

SMUD’s Board of Directors has established the following purpose and vision statements: “SMUD’s purpose is to enhance the quality of life for our customers and community by providing reliable and affordable electricity, and leading the transition to a clean energy future. SMUD’s vision is to be a trusted and powerful partner in achieving an inclusive, zero carbon economy. SMUD will leverage its relationships to accelerate innovation, ensure energy affordability and reliability, protect the environment, eliminate greenhouse gas emissions, catalyze economic and workforce development, promote environmental justice, and enhance community vitality for all.” The Board has adopted a set of Strategic Directions with related metrics, which it considers essential for the success of SMUD and for serving SMUD’s customers. These include competitive rates, access to credit markets, reliability, customer relations, environmental leadership, resource planning, enterprise risk management and safety. Some of the general elements in SMUD’s business strategy are:

- developing and maintaining a sustainable and reliable power supply to meet demand growth consistent with State mandates and the Board’s directions for renewable energy and the reduction of carbon emissions to zero by 2030. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *2030 Zero Carbon Plan*”;
- working closely with customers to provide the information, tools and incentives to assist them to more efficiently manage energy use, which will contribute to meeting greenhouse gas (“GHG”) emission targets and managing needle peak demand requirements (those 40 or so hours of the year with extreme temperatures when customer demand surges by up to 400 additional MW);
- managing price, volumetric and credit risks associated with energy and natural gas procurement;
- attracting, developing and retaining a diverse, skilled and engaged workforce that reflects SMUD’s values and is committed to achieving SMUD’s mission;
- retaining local decision making authority and operational independence; and
- collaborating regionally to attract new businesses and grow existing business to diversify and strengthen the Sacramento economy.

SMUD’s long-range business strategy focuses in part on ensuring financial stability by establishing rates that provide an acceptable fixed charge coverage ratio on a consolidated basis, taking into consideration the impact of capital expenditures and other factors on cash flow. SMUD’s Board policy sets

a minimum fixed charge coverage ratio of 1.50 times for annual budgets, though it generally plans to meet a minimum fixed charge coverage ratio of 1.70 times. Over the past ten years, the actual fixed charge coverage ratio has averaged 2.06 times on a consolidated basis. SMUD also manages its liquidity position by planning for a minimum of 150 days cash on hand and planning to maintain at least \$150 million of available capacity under its commercial paper and line of credit program. SMUD's commercial paper and line of credit program is currently authorized for \$400 million aggregate principal amount outstanding at any one time. As of March 1, 2023, SMUD had \$200 million aggregate principal amount of its commercial paper notes outstanding and \$200 million of the authorized aggregate principal amount of its commercial paper and line of credit program available for use. SMUD uses cash on hand and commercial paper and a line of credit to fund capital expenditures, then issues debt to reimburse itself for cash expended for qualified capital expenditures or to pay down the outstanding principal amount of its commercial paper program and line of credit. Over the past ten years, the days cash on hand has averaged 222. The resolutions securing SMUD's Senior Bonds and Subordinated Bonds (each as defined under the caption "CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS" below) do not require SMUD to maintain a minimum fixed charge coverage ratio, minimum days cash on hand or minimum available capacity under its commercial paper program and line of credit.

In addition, SMUD's business strategy focuses on servicing its customers in a progressive, forward-looking manner, addressing current regulatory and legislative issues and potential competitive forces.

Serving SMUD's Customers

SMUD continually looks for ways to better serve and partner with its customers to further strengthen customer loyalty, while providing reasonable product pricing. SMUD also has a focused effort to assist and incentivize customers to manage energy use more efficiently, which will contribute to meeting GHG emission targets and managing peak demand requirements as noted below.

Digital Enhancements. Customers are increasingly turning to digital channels including SMUD's mobile application, SMUD.org, e-mail and social media to interact and do business with SMUD. SMUD has delivered many digital enhancements, including bill pay functionality; online payment arrangements; start/stop/transfer move service; view of energy usage, chat, an enhanced outage map including a newly launched meter test functionality; and the SMUD Energy Store, which is an online marketplace for energy-related products. SMUD plans to continue efforts to provide more personalized digital customer experiences.

Advanced Metering, Infrastructure and Rate Design. As a community-owned organization, SMUD is dedicated to providing the tools and transparency in customer energy usage to enable customers to easily and positively affect energy usage, energy cost, and climate change. In 2012 SMUD installed smart technology, including 617,000 digital communicating smart meters, distribution automation systems and equipment to facilitate load management. The advanced technology has allowed SMUD to deliver tools such as text and e-mail bill alerts and online energy usage comparison charts to help customers manage energy use. SMUD has leveraged smart grid investments to improve reliability, reduce losses, reduce power quality issues and improve customer service through better, more timely information.

Time-of-Day Rates. On June 15, 2017, the Board approved time-of-day ("TOD") rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018 and was completed in the fourth quarter of 2019.

All of SMUD's business customers are also on time-based rates. On June 24, 2019, the Board approved an update to the commercial TOD rates to improve consistency and better align commercial rates with current energy market prices. Due to the impacts of the COVID-19 pandemic on SMUD's operations

and priorities, on August 20, 2020, the Board postponed the implementation of the commercial rate restructure for one year. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges.”

Renewable Options. SMUD’s customers have been increasingly interested in distributed energy resources, mainly through the installation of solar systems. As of January, 2023, approximately 47,615 of SMUD’s residential and commercial customers, approximately 7% of retail customers, had installed solar systems, representing approximately 324 MW of solar installations.

As the cost of energy storage continues to decline, SMUD anticipates an increase in behind-the-meter energy storage, mainly through the installation of battery storage systems. As of January 2023, approximately 1,183 of SMUD’s residential and commercial customers, approximately [2]% of retail customers, had installed storage systems, representing approximately 8 MW of storage.

As another option for solar, SMUD’s SolarShares® pilot program (the “SolarShares Pilot”) was established as a cost-effective and convenient way for commercial customers to meet their energy needs from solar power. The SolarShares Pilot offered SMUD commercial customers the opportunity to receive solar power without upfront costs or equipment installation through 5-, 10- or 20-year purchase contracts. Customers that entered into purchase contracts under the SolarShares Pilot receive up to half of their power from a utility-scale solar system. SMUD supplies solar power for the SolarShares Pilot either by building and maintaining utility-scale solar systems or by procuring solar power from third parties through power purchase agreements. The SolarShares Pilot generation was approximately 3.0% of retail sales in 2022. As of April 30, 2021, SMUD had completed the SolarShares Pilot and is not entering into new purchase contracts under the SolarShares Pilot.

Since January 2020, the California Building Code has required all newly constructed residential buildings under three stories to be powered by photovoltaic solar systems. A new home satisfies this requirement if it installs on-site solar or participates in an approved community solar or energy storage program. In February 2020, SMUD obtained approval from the California Energy Commission (“CEC”) to administer its own community solar program, called Neighborhood SolarShares® (“Neighborhood SolarShares”). SMUD’s Neighborhood SolarShares program can be used by developers of new low-rise residential buildings to satisfy the mandatory solar requirement. See also “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Rooftop Solar Mandate*.” Starting in 2023, the California Building Code’s mandatory solar requirement extends beyond low-rise residential properties, and other changes to the California Building Code’s community solar regulations took effect. SMUD revised its program to align with the new regulations and, in May 2023, obtained approval from the CEC to continue offering its Neighborhood SolarShares compliance option to newly constructed low rise residential homes in its service territory.

In addition to the SolarShares Pilot and Neighborhood SolarShares, SMUD maintains a voluntary green energy pricing program called Greenergy® (“Greenergy”). The Greenergy program allows customers the opportunity to pay an additional amount per month to ensure that either all or part of their electricity comes from green or carbon free energy sources. In 2022, the program allocated Renewable Energy Credits (“RECs”) equivalent to approximately 4.9% of retail sales to its participating customers.

Energy Efficiency. To further assist customers in managing energy usage and reducing regional carbon emissions and air pollution, SMUD offers an extensive array of energy efficiency and building electrification programs and services including financial incentives, loans, energy audits and education. In addition, SMUD has partnered with local developers to incorporate energy efficiency and all-electric construction measures into new residential and commercial construction, which helps developers plan and design efficient, cost-effective and low or zero-emission buildings. As part of SMUD’s 2019 Integrated

Resource Plan (“IRP”), SMUD set a goal for regional carbon emissions through transport and building electrification that aims to reduce carbon emissions in buildings and transport by 64% over the next 20 years. SMUD’s focus on electrification is continued in the Zero Carbon Plan (defined and discussed below). SMUD was the first electric utility in the country to set its efficiency goals based on carbon reductions, allowing building electrification and energy efficiency to both count toward meeting SMUD’s efficiency goals. This is a significant opportunity, as converting a typical home today to all-electric saves more than three times the carbon emissions compared to doing a major energy efficiency upgrade alone to the same building. See “POWER SUPPLY AND TRANSMISSION – Projected Resources.”

Sustainable Power Supply and Transmission

Maintaining a sustainable power supply entails focusing efforts on researching, promoting and implementing new renewable energy technologies and sources to meet SMUD’s long-term commitment to reducing carbon emissions and providing a reliable energy supply. SMUD defines a sustainable power supply as one that reduces SMUD’s GHG emissions to serve retail customer load to zero by 2030. See “– 2030 Zero Carbon Plan” below. SMUD is planning to achieve zero GHG emissions to serve retail customer load through investments in energy efficiency, clean distributed energy resources, renewables portfolio standard (“RPS”) eligible renewables, energy storage, large hydroelectric generation, clean and emissions free fuels, and new technologies and business models. Additionally, SMUD plans to continue pursuing GHG emissions reductions through vehicle, building and equipment electrification. At the same time, SMUD’s plans for maintaining a sustainable power supply include assuring the reliability of SMUD’s electric system, minimizing environmental impacts on land, habitat, water and air quality, and maintaining competitive rates relative to other electricity providers in the State.

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills regulate GHG emissions and encourage greater investment in energy efficiency and sustainable generation alternatives, principally through more stringent RPS. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings” herein.

2030 Zero Carbon Plan. In July 2020, the Board declared a climate emergency and adopted a resolution calling for SMUD to take significant and consequential actions to reduce its carbon footprint by 2030. On April 28, 2021, the Board approved SMUD’s 2030 Zero Carbon Plan (the “Zero Carbon Plan”). The Zero Carbon Plan is intended to be a flexible roadmap for SMUD to eliminate carbon emissions from its electricity production by 2030 while maintaining reliable and affordable service. To achieve these goals the Zero Carbon Plan is focused on four main areas: natural gas generation repurposing, proven clean technologies, new technologies and business models and financial impacts and options. SMUD plans to revisit the Zero Carbon Plan annually.

The natural gas generation repurposing focus of the Zero Carbon Plan calls for exploring the replacement of two of SMUD’s five Local Gas-Fired Plants (as defined herein) and the retooling of the other three Local Gas-Fired Plants. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Local Gas-Fired Plants.*” Based on SMUD’s studies to date, SMUD estimates that McClellan (as defined herein) and the Campbell Soup Project (as defined herein) can be replaced by mid-decade. Final decisions about the replacement of these two Local Gas-Fired Plants will be based on additional reliability studies and engagement with the community. As part of the Zero Carbon Plan, SMUD is also exploring converting the Carson Project (as defined herein) and the Procter & Gamble Project (as defined herein) to reliability use operations only and investigating the use of alternative fuels like Renewable Natural Gas-biomethane (RNG-biomethane), hydrogen and other biofuels for the Carson Project, the Procter & Gamble Project, and the Consumnes Power Plant (as defined herein). In addition, SMUD is investigating new technologies such as long duration energy storage, carbon capture and sequestration, hydrogen and other

clean fuel alternatives to help support natural gas repurposing. All final generator configurations are subject to reliability assessments.

The proven clean technologies focus of the Zero Carbon Plan calls for SMUD to procure approximately 1,100 to 1,500 MW of utility-scale solar photovoltaic (“PV”) generating capacity, 700 to 1,100 MW of local utility-scale battery storage, 300 to 500 MW of wind generating capacity, and 100 to 220 MW of geothermal generating capacity. The Zero Carbon Plan also estimates that customer installation of approximately 500 to 750 MW of behind-the-meter solar PV generating capacity and approximately 50 to 250 MW of behind-the-meter battery storage will assist SMUD with achieving the Zero Carbon Plan goals.

With respect to new technologies and business models, the Zero Carbon Plan focuses on evaluating, prioritizing and scaling the emerging technologies that SMUD expects will have the largest impact on reducing carbon in SMUD’s 2030 resource mix. SMUD is currently focused on various areas of technology and customer-focused programs, including electrification, education, demand flexibility, virtual power plants, vehicle-to-grid technology, and new grid-scale technologies. The Zero Carbon Plan forecasts that customer-owned resources and SMUD customer-focused programs will contribute between 360 and 1,300 MW of capacity to SMUD’s grid by 2030.

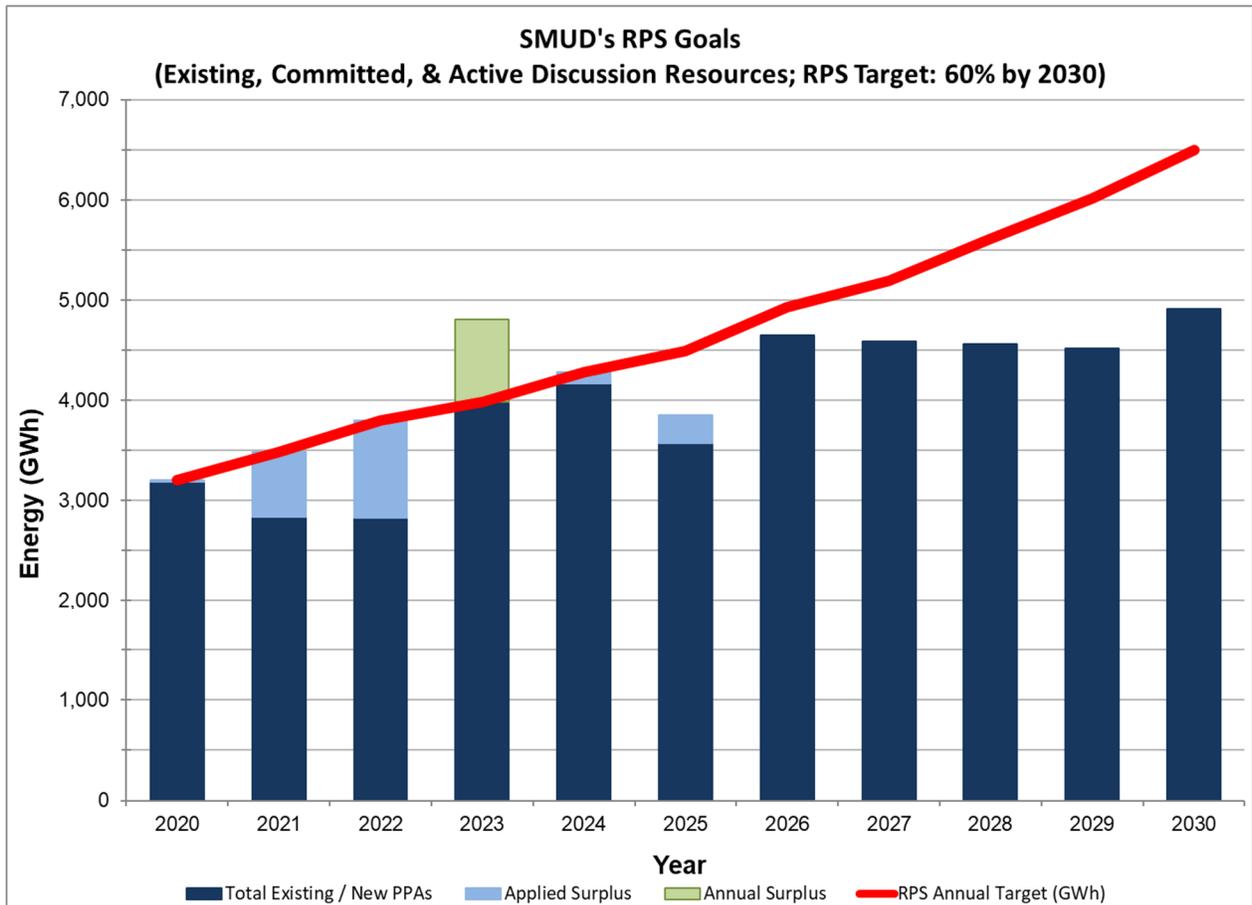
The financial impacts and options focus of the Zero Carbon Plan aims to keep SMUD rate increases at or below the rate of inflation while achieving SMUD’s goal of eliminating carbon emissions from its power supply by 2030. To pay for the expected costs of the Zero Carbon Plan and keep rate increases at or below the rate of inflation, the Zero Carbon Plan estimates the need for SMUD to realize between \$50 million and \$150 million of sustained annual savings. SMUD currently plans to achieve these sustained annual savings by exploring the implementation of operational savings strategies and pursuing partnership and grant opportunities.

While the ultimate impacts of the Zero Carbon Plan on SMUD’s financial results and operations are difficult to predict and are dependent on a variety of factors, such as the relative cost of procuring energy from clean technologies, the availability and relative cost of new technologies, and the adoption and implementation of energy efficiency and other measures by SMUD’s customers, such impacts could be material.

Renewable Energy and Climate Change. The California Renewable Energy Resources Act, established by Senate Bill X1-2 (“SBX1-2”) and the Clean Energy and Pollution Reduction Act of 2015, enacted by Senate Bill 350 (“SB 350”) require that SMUD meets 33% of its retail sales from RPS-eligible renewable resources by 2020 and 50% of its retail sales from RPS-eligible renewable resources by 2030. Senate Bill 100 (“SB 100”), passed by the legislature and approved by then-Governor Brown on September 10, 2018, accelerates the RPS targets and establishes a new 60% target by 2030. The bill also created a planning goal to meet all of the State’s retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Renewables Portfolio Standards*” for a discussion of the State RPS requirements.

SMUD’s compliance with State RPS requirements is evaluated over 3 or 4-year compliance periods. SMUD met the State RPS requirements for the first compliance period (2011-2013) and second compliance period (2014-2016). The third compliance period (2017-2020) required SMUD to source one-third of its energy from renewable resources, and SMUD had sufficient RECs to meet the third compliance period requirements. SMUD filed its 2020 and third compliance period RPS compliance report with the CEC in the second quarter of 2021 and is awaiting verification of its submission from the CEC which is expected to occur by the end of 2023. As of the end of the third compliance period (2020), SMUD had

approximately 1.0 million surplus RECs available to help meet future RPS targets. SMUD expects to file its 2022 RPS compliance report by July 1, 2023, and due to increased load compared to forecast in 2022, and a delayed commercial online date for the NTUA solar project, expects to have provided 34.1% of its retail sales from RPS-eligible renewable resources in 2022, which is less than the interim 2022 RPS target of 38.5%. However, RPS compliance is determined by compliance period and not by individual years and SMUD anticipates that it has sufficient surplus procured and/or under contract resources in 2023 and 2024 to offset the 2022 shortfall. Therefore, SMUD expects to be in compliance with the RPS requirements for the fourth compliance period (2021 – 2024). In addition to meeting RPS standards, SMUD serves an additional 7.3% of its customer load with renewable energy through its voluntary SolarShares and Greenergy pricing programs described above. SMUD estimates that it has sufficient renewable energy deliveries, new power supply contract commitments, new power supply commitments under active discussion, and RPS-eligible surplus carryover to meet its RPS requirements through 2024. Additional resources have been identified in solicitations currently under way that are expected to provide sufficient RPS-eligible resources to cover most of SMUD’s RPS requirements through 2030. Future solicitations are expected to provide the additional resources to fill any remaining gaps. The following chart illustrates SMUD’s current RPS requirements through 2030 and its existing and committed resources, and its resources under active discussion that are expected to be utilized to meet those requirements.



In addition to procuring new sources, meeting the RPS requirements will require replacement of certain existing renewable contracts which expire in future years. While SMUD anticipates it will meet much of its renewable resource requirements through purchase contracts with third parties, it continues to explore additional options, including wind, solar, biomass, and geothermal developments, partnering with other utilities on future projects, and local development options. SMUD’s resource forecast (see “POWER SUPPLY AND TRANSMISSION – Projected Resources”) accounts for future renewable resources as a component of “Uncommitted Purchases.” To meet SMUD’s Zero Carbon Plan goals, SMUD anticipates meeting loads in 2030 with approximately 70-80% renewable resources, in addition to hydro and other new zero carbon technologies. See “– 2030 Zero Carbon Plan” above.

Given the intermittent nature of power from renewable resources such as wind and solar, SMUD is exploring and investing in options that provide the flexibility to manage the intermittency of such renewable resources. Potential options include energy storage resources, which SMUD has committed to as part of the Zero Carbon Plan, and expanding load management resources. Additionally, on April 3, 2019, SMUD, through its membership in BANC, a joint exercise of powers agency formed in 2009, and currently comprised of SMUD, the Modesto Irrigation District (“MID”), the City of Roseville (“Roseville”), the City of Redding (“Redding”), the City of Shasta Lake and the Trinity Public Utilities District, has commenced its participation in the California Independent System Operator Corporation (“CAISO”) western energy imbalance market (“WEIM”). Participation in the WEIM benefits SMUD by providing it with broader access to balancing resources within the region to help manage its expanding renewable portfolio. In addition, other entities within the BANC Balancing Authority Area began participation in the WEIM on March 25, 2021. See “BUSINESS STRATEGY – Serving SMUD’s Customers – *Operational Independence and Local Control*” and “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.”

In 2018, SMUD’s Board adopted a new IRP through a comprehensive public process and filed the approved IRP with the CEC on April 29, 2019 pursuant to the CEC’s IRP guidelines. The approved IRP calls for a reduction in GHG emissions from SMUD’s energy supply by more than 60% by 2030 relative to 1990 levels and a goal of net zero emissions by 2040 due, in part, to a significant investment in electrification of the local building and transportation sectors. The IRP was expected to reduce Sacramento’s economy-wide GHG emissions by 70% relative to current levels. SMUD’s Zero Carbon Plan, adopted in 2021, built upon the IRP and set a goal of zero carbon emissions by 2030. On September 14, 2022, SMUD submitted an updated IRP filing with the CEC to incorporate the goals set in the Zero Carbon Plan pursuant to the CEC’s IRP guidelines. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *2030 Zero Carbon Plan*.”

The State’s carbon cap-and-trade market established pursuant to Assembly Bill 32 (“AB 32”) began in 2013. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Greenhouse Gas Emissions*” for a discussion of AB 32 and the State’s cap-and-trade program. SMUD anticipates that allowances allocated to SMUD will nearly equal SMUD’s compliance obligations under normal water year conditions. Under low water year conditions, SMUD may need to purchase additional allowances to cover its compliance obligations, including carbon obligations related to wholesale energy sales from SMUD’s natural gas power plants. As SMUD implements its clean power goals, SMUD expects its need for these allowances to decline.

There is scientific consensus that increasing concentrations of GHG have caused and will continue to cause a rise in temperatures in the State and around the world. The change in the earth’s average atmospheric temperature, generally referred to as “climate change,” is, among other things, expected to result in a wide range of changes in climate patterns, including increases in the frequency and severity of extreme weather events, including droughts and heat waves, more frequent incidences of wildfires, changes in wind patterns, sea level rise and flooding, any of which alone or in combination could materially

adversely affect SMUD’s financial results or operations. See also “FACTORS AFFECTING THE REGION” and “OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Other Factors.” As described above, SMUD is actively working to meet its sustainable power supply goals, reduce its own GHG emissions, and assist the local governments in the territory it serves with their desired GHG reductions. In 2016, SMUD introduced the Pilot Natural Refrigerant Incentive Program, its first customer program providing incentives for GHG reduction in addition to kWh savings. SMUD is a founding member and active participant in the Capital Region Climate Readiness Collaborative, a public private partnership formed to better understand and plan for climate impacts expected in the region. SMUD is also an active member of the United States Department of Energy (the “DOE”) Partnership for Energy Sector Climate Resilience. SMUD regularly reviews scientific findings related to climate change and in 2016 published its Climate Readiness Assessment and Action Plan. In 2024, SMUD is planning to update the Climate Readiness Assessment and Action Plan along with other climate resiliency actions.

Energy Storage Systems. Assembly Bill 2514 (“AB 2514”) requires the Board to re-evaluate energy storage goals every three years. In compliance with AB 2514, the Board established a target of 9 MW of energy storage procurement by December 31, 2020, which SMUD has procured. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Energy Storage Systems*” for further discussion of AB 2514. In September 2020, the Board directed that energy storage forecasts be implemented through SMUD’s IRP process going forward. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*” above for a discussion of SMUD’s IRP. SMUD is also evaluating how to couple utility-scale solar with utility-scale storage to support future system reliability needs and renewable energy goals.

Meeting Peak Load. A significant consideration for SMUD will be how it addresses its system peak load. SMUD has implemented programs and tools, such as advanced metering, energy efficiency options, and TOD rates for residential customers, to help customers manage their costs while helping SMUD reduce its peak load. Analysis of 2021 data showed a reduction of approximately 115 MW, weather adjusted, for residential customers during the TOD peak period (5-8 p.m. local time). SMUD staff will continue to monitor the progress and results of the implementation of TOD rates and will use this information to inform future rate actions and load forecasts. See “BUSINESS STRATEGY – Serving SMUD’s Customers – *Time-of-Day Rates.*”

On September 16, 2021, the Board approved an optional residential Critical Peak Pricing rate (the “Peak Pricing Rate”), which went into effect June 1, 2022. The Peak Pricing Rate is designed to reduce load by increasing the price of energy when the grid is most impacted, up to 50 hours per summer. In exchange, customers on the rate will receive a per kWh discount on summer Off-Peak and Mid-Peak rates. SMUD is also exploring the use of more distributed energy resources and demand response programs that could further reduce SMUD’s system peak.

Operational Independence and Local Control. A key component of SMUD’s business strategy is focused on maintaining its independence in operating and maintaining its resources. As such, SMUD has taken a number of actions to mitigate the potential impacts of various federal and state regulatory actions. For example, in 2002 SMUD established itself as an independent control area (now termed “Balancing Authority”) within the Western Electricity Coordinating Council (“WECC”) region. By removing itself from CAISO’s Balancing Authority area, SMUD became responsible for balancing electric supply and demand within its own service territory. This move substantially reduced fees paid to CAISO, preserved operational flexibility and helped to insulate SMUD from the uncertain regulatory environment and tariff structure of CAISO. In addition to decreased financial risks, this independence also reduced SMUD’s exposure to the impacts of capacity and energy shortages in the CAISO Balancing Authority area. Further, as an independent Balancing Authority, SMUD continued to support the statewide electric grid in events of electrical emergencies requiring rotating outages, such as loss of major transmission lines or equipment,

as provided in the statewide emergency plan. By 2006, the SMUD Balancing Authority footprint expanded north to the California-Oregon border and south to Modesto, to include the service areas of the WAPA, MID, Redding and Roseville, and TANC -owned 340-mile 500-kV California-Oregon Transmission Project (“COTP”). In October 2009, SMUD, with the coordination and cooperation of WAPA, joined the Western Power Pool Reserve Sharing Group, which supports reliability and reduces operating costs. In May 2011, BANC assumed the role of the Balancing Authority, though SMUD continues to oversee operation of the grid on behalf of BANC. BANC members share cost responsibility for balancing authority-related compliance obligations, liabilities, and operations. BANC also serves as an important venue for SMUD and other BANC members to collaborate with respect to operational and market improvements inside the BANC footprint and to preserve their operational independence. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.” On April 3, 2019, SMUD, through its participation in BANC, began operating in the CAISO WEIM, which helps SMUD better manage the integration of renewable energy resources. The CAISO WEIM is a voluntary market, which allows SMUD to maintain its operational independence from the CAISO, while providing SMUD greater access to balancing resources throughout the western region. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.”

FERC Order 1000. In 2011, the Federal Energy Regulatory Commission (“FERC”) issued Order 1000, which mandates regional transmission planning and imposes a regional cost allocation methodology for transmission facilities. FERC states that it has the authority to allocate costs to beneficiaries of transmission services even in the absence of a contractual relationship between the owner of the transmission facilities and the beneficiary. Despite appeals challenging FERC’s authority on a number of grounds, the D.C. Circuit Court of Appeals upheld Order 1000. See “DEVELOPMENTS IN THE ENERGY MARKETS – Federal Legislation and Regulatory Proceedings – *Federal Regulation of Transmission Access.*” Nevertheless, there remains flexibility with respect to SMUD’s participation in regional transmission planning. Specifically, SMUD is voluntarily participating as a Coordinating Transmission Owner (“CTO”) in the WestConnect transmission planning organization, and will rely on its WestConnect membership to keep it Order 1000 compliant. While SMUD opposes any cost allocation methodology that would obligate SMUD to pay for facilities that it does not use or need to maintain reliable operations or serve its load, the FERC-approved WestConnect planning process does provide a CTO the option to not accept an allocation of costs. WestConnect is composed of utility companies providing transmission of electricity in a portion of the western United States, working collaboratively to assess stakeholder and market needs and develop cost-effective enhancements to the western wholesale electricity market. SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD’s electric system or the electric industry generally.

Electricity, Natural Gas, and Related Hedging

SMUD continues to utilize a comprehensive and integrated power and fuel supply strategy to acquire a reliable and diversified portfolio of resources to meet existing and future needs. This strategy includes a combination of both physical supply and financial hedging transactions to reduce price risk exposure over a five-year horizon. SMUD’s physical supply arrangements include ownership of power generating resources, as well as a diversified portfolio of power and fuel supply purchase contracts that range in duration, with a mixture of fixed and variable pricing terms.

With regard to the power purchase contracts, SMUD has entered into a series of contracts for the purchase of electricity to supply the portion of its resource needs not already provided by owned resources. SMUD also actively manages its exposure on variable rate electricity purchases, and at times may enter into financial contracts to fix prices by using options to reduce price risk, in each case when warranted by economic conditions. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements.”

With regard to fuel supply contracts, SMUD utilizes a similar strategy of employing financial contracts of various durations to hedge its variable rate fuel supply contracts. As of March 31, 2023, these contracts are forecasted to have hedged the price exposure on approximately 83%, 66% and 55% of SMUD’s anticipated natural gas requirements for 2023, 2024 and 2025, respectively. While the financial effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted. See “POWER SUPPLY AND TRANSMISSION – Fuel Supply – *Supply*.”

As provided in SMUD’s natural gas contracts, SMUD may be required to post collateral to various counterparties. As of March 28, 2023, SMUD did not have any collateral posting obligations. A decrease in natural gas prices could result in a collateral posting by SMUD. While the posting of collateral is not an expense for SMUD, it does temporarily encumber unrestricted cash balances.

To hedge against hydroelectric production volatility of SMUD-owned hydroelectric facilities, SMUD implemented a pass-through rate component called the Hydro Generation Adjustment (the “HGA”). The HGA and the associated Hydro Rate Stabilization Fund (the “HRSF”) help to offset increased power supply or fuel supply costs in years where precipitation levels at SMUD-owned hydroelectric facilities are low. To hedge against variations in the volume of energy received from non-SMUD-owned hydroelectric resources, SMUD uses a rate stabilization fund to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

Managing Risks

SMUD maintains an Enterprise Risk Management (“ERM”) program, a strategic approach to managing enterprise-wide risks as a portfolio, to help reduce the chance of loss, create greater financial stability and protect SMUD resources. It is designed to maintain an early warning system to monitor changes in, and the emergence of, risks that affect the organization’s business objectives. Under the purview of the Enterprise Risk Oversight Committee, composed of executive members and chaired by the Chief Financial Officer, ERM conducts ongoing risk identification, assessments, monitoring, mitigation, risk-based budgeting and reporting. To ensure accountability and oversight, each identified risk is assigned to an executive-level risk owner. Risk status and mitigation efforts are reported monthly to the Board.

Competitive Challenges

In the coming decade, utilities like SMUD may face competition from companies in other industries looking to diversify into the energy sector. Examples of developing competitive areas include retail sale of electricity, distributed electric storage resources, renewable distributed generation (mostly solar in Sacramento), customer installation of fuel cells, third-party electric vehicle charging, home or business automation that enables greater customer participation in energy markets, and third-party provision of energy management software and solutions.

SMUD has a wide range of initiatives to monitor and adapt to changing market conditions and new industry participants. Key areas of focus include:

- Enhancing customer experience. Recognizing the importance of meeting customer expectations, SMUD introduced the Customer Experience Strategy in 2016 to provide customers “value for what they pay” and further strengthen customer loyalty. The initiative is focused on ensuring SMUD has the people, systems, technology, programs and services to consistently meet or exceed customers’ changing expectations. The customer experience is measured via surveys with the goal of achieving 80% of customers agreeing that SMUD provides them with value for what they pay by 2030.

- Restructuring electric rates. In 2017, the Board approved TOD rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018, and the full transition was completed in the fourth quarter of 2019. All of SMUD’s business customers are also on time-based rates. In 2019, the Board approved a restructuring of commercial rates to collect a greater portion of fixed costs through fixed charges and to better align time periods and prices with energy markets. The commercial rate restructuring was delayed by one year due to the impacts of the COVID-19 pandemic. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges” and “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”
- Ongoing integrated resource planning. SMUD monitors and updates its integrated resource planning to ensure future sources of energy balance cost, reliability and environmental requirements with the flexibility to meet challenges of changing market and regulatory conditions, customer energy resources, and emerging technologies.

Leveraging Core Competencies

In addition to these initiatives, SMUD is leveraging core competencies to improve industry safety and help communities serve their customers’ energy needs.

Sacramento Power Academy. SMUD is leveraging its significant experience in training skilled line-workers with the opening of the SMUD Power Academy regional training center in 2016. The academy currently emphasizes training for public power, customer-owned utility employees. There are currently approximately 2,000 customer-owned utilities in the United States that are similar to SMUD, many of which may not have the resources to adequately train their employees. In addition to line-workers, the center will also train substation and network electricians. Other future plans include training electrical, telecom and meter technicians; engineers and designers; construction management inspectors; equipment operators; cable splicers and locators; and support staff.

Community Energy Services. In 2002, Assembly Bill 117 was passed to establish Community Choice Aggregation in the State by authorizing Community Choice Aggregators (“CCAs”) to aggregate customer electric load and purchase electricity for customers. SMUD’s Community Energy Services department was established in 2017 to support organizations with values closely aligned with SMUD’s values, while also generating additional revenue for SMUD. CCA programs are proliferating in the State thanks to support for expanding renewable energy use and desire for local control particularly for electricity procurement. There are numerous CCAs operating in the State, and more are anticipated to launch in the future. CCAs are responsible for procuring wholesale power, setting the generation rate, and staffing a call center to handle opt-outs and questions about the power portfolio. The local investor-owned utility (“IOU”) continues to deliver electricity from the electric grid, maintain its electric infrastructure, bill customers and collect payments.

In October 2017, SMUD was selected by the governing board of Valley Clean Energy (“VCE”) to provide technical, energy and support services, including data management and call center services, wholesale energy services, and business operations support, to VCE for a five-year term [expiring May 31, 2023. SMUD and VCE are currently negotiating a new contract.] VCE is a joint powers agency formed in 2016 by the City of Woodland, the City of Davis and Yolo County to implement a local CCA program. The service territory expanded to include the City of Winters in 2021. The mission of VCE is to deliver cost-competitive clean electricity, product choice, price stability, energy efficiency, and greenhouse gas emissions reductions to its customers in Yolo County. VCE began electric services to its customers in the summer of 2018, giving Yolo County residents a choice between two electricity providers, VCE and PG&E.

In November 2017, SMUD was selected by the governing board of East Bay Community Energy (“EBCE”) to provide call center and data management services for a three-year term beginning in January 2018. SMUD signed a new contract with EBCE in January 2022 for call center and data management services for an additional three-year term. EBCE is a joint powers agency formed in 2016 by the cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, Piedmont, San Leandro and Union City in Alameda County to implement a local CCA program. EBCE expanded its territory to the cities of Pleasanton, Newark, and Tracy in April 2021.

In June 2019, SMUD was selected by the governing board of Silicon Valley Clean Energy (“SVCE”) to provide program services to help local SVCE communities reduce carbon pollution while delivering engaging customer experiences. SVCE programs are focused on grid integration, as well as electrifying transportation, buildings and homes. SVCE is a joint powers agency formed in 2016 by the cities of Campbell, Cupertino, Gilroy, Lost Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County to implement a local CCA program.

In July 2022, SMUD was selected by the governing board of Marin Clean Energy (“MCE”) to provide data management, billing, data analytic and system assessment services to MCE. MCE is a joint powers agency formed in 2010 and represents 37 member communities across four Bay Area counties: Contra Costa, Marin, Napa and Solano.

In September 2022, SMUD was selected by the governing board of Sonoma Clean Power (“SCP”) to provide market research services to SCP. SCP is a joint powers agency that serves Sonoma and Mendocino counties.

While CCAs have had success in the State, they are susceptible to business, regulatory and other risks that could lead to a financial loss and/or result in a cessation of operations for the CCA. These risks could extend to a CCA’s counterparties, including SMUD. SMUD has made an effort to identify and mitigate potential counterparty risks to the extent possible in service agreements with the CCAs described above. SMUD may pursue opportunities to provide similar services to additional CCAs in the future. SMUD management does not expect its current arrangements to have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

FACTORS AFFECTING THE REGION

Precipitation Variability

SMUD uses a National Weather Service precipitation station located at Pacific House, California to approximate available water supply to SMUD’s Upper American River Project (the “UARP”) hydropower reservoirs. As of March 31, 2023, precipitation at Pacific House, California totaled 77 inches for the October-September hydropower water supply period. This is 185% of the 50-year rolling median of 42 inches. Total reservoir storage in the UARP hydropower reservoirs was 269 [TAF] as of April 18, 2023, which was about 71% of capacity, approximately 8% below the historical average for this date to accommodate snowpack which was 156% of normal. SMUD manages its reservoirs to maximize water storage going into the summer season, which preserves generating capacity during SMUD’s high load months and ensures that SMUD meets its UARP FERC license requirements, including requirements for recreational and environmental flows.

There can be wide swings in precipitation from year to year. In years with below average rainfall, SMUD may have to generate or purchase replacement energy at additional cost. To hedge against variations in the volume of energy received from SMUD-owned UARP hydroelectric resources, SMUD uses the

HRSF to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

SMUD is also exposed to precipitation variability through its contract with the WAPA. In an average water year this contract provides roughly 661 gigawatt hours (“GWh”) of power. WAPA’s actual deliveries are based on hydroelectric generation (minus energy use for pumping) at Central Valley Project reservoirs in Northern California, which varies based on annual precipitation patterns, water deliveries for agriculture, and flow requirements in the Sacramento-San Joaquin River Delta. Unlike the UARP, SMUD does not monitor precipitation stations to approximate power deliveries under the WAPA contract, and instead relies on a forecast of power deliveries from WAPA. As of March 31, 2023, WAPA has forecasted power deliveries of 451 GWh for 2023, down approximately 32% less than an average water year. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – *Western Area Power Administration*.”

Wildfires

General. Wildfires in the State have become increasingly common and destructive. Frequent drought conditions and unseasonably warm temperatures have increased, and could further increase, the possibility of wildfires occurring in areas where SMUD maintains generation, transmission and distribution facilities. The number of diseased and dead trees has increased, and could further increase, this possibility. As a result, SMUD faces an increased risk that it may be required to pay for wildfire related property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits), or may be disputed by insurers, and could be material. In addition, a significant fire or fires in SMUD’s generation, transmission or service area could result in damage or destruction to SMUD’s facilities, result in a temporary or permanent loss of customers or otherwise materially increase SMUD’s costs or materially adversely affect SMUD’s ability to operate its Electric System or generate revenues.

SMUD’s service territory is located within Sacramento County, which is located outside the California Public Utilities Commission (the “CPUC”) high fire threat areas established in 2018. However, as described below, SMUD’s UARP facilities and certain of SMUD’s and TANC’s transmission facilities are within CPUC high fire threat areas. In addition, as described below, certain portions of SMUD’s service territory are located within the California Department of Forestry and Fire Protection (“Cal Fire”) Fire Protection and Resource Assessment Program (“FRAP”) Moderate, High and Very High Fire Hazard Severity Zones. SMUD’s exposure to liability for damages related to its UARP facilities, which are located within high fire threat areas in El Dorado County, is reduced due to risk mitigation measures adopted by SMUD and the low number of inhabitants and structures near the UARP facilities (See “Wildfire Mitigation” below). SMUD continues to take responsible action to minimize its exposure to liability from wildfires; however, under current State law, utilities can be held liable for damages caused by wildfires sparked by their equipment or other facilities regardless of whether the utility was negligent or otherwise at fault. Therefore, at this time the full extent of SMUD’s potential exposure to wildfire risk is unknown.

Distribution (SMUD Service Territory). State law requires Cal Fire to classify areas in the State based on the severity of the fire hazard that is expected to prevail there. These areas or “Fire Hazard Severity Zones” are based on factors such as fuel (material that can burn), slope and the expected chance of burning. There are three Fire Hazard Severity Zones (Moderate, High and Very High) based on increasing fire hazard. Portions of SMUD’s service territory are located within these Fire Hazard Severity Zones. SMUD has assessed its service territory based on Cal Fire’s FRAP map, adopted in 2007; the following table illustrates SMUD’s assessment of the approximate extent of its service territory and retail customer base located within the three Fire Hazard Severity Zones.

Fire Hazard Severity Zone	Moderate	High	Very High
Acres of SMUD Service Area	231,816	2,337	1,061
% of Total SMUD Service Area	40.6%	0.4%	0.2%
Number of Retail Customers	53,621	4,285	148
% of Total Retail Customers	7.7%	0.6%	0.0%

Transmission (Outside of SMUD Service Territory). In 2018, the CPUC approved a new statewide fire map that identifies areas of elevated and extreme wildfire risk from utility-associated assets located throughout the State. SMUD directly participated in the development of the CPUC’s statewide fire map. In connection with the development of the CPUC’s statewide fire map, a peer review and a team of independent nationwide experts led by Cal Fire affirmed that SMUD’s electric service area is properly located outside of these elevated (“Tier 2”) and extreme (“Tier 3”) high fire threat areas; however, SMUD’s UARP facilities are located within both Tier 2 and Tier 3 areas. According to the CPUC, Tier 2 fire-threat areas are areas where there is an elevated wildfire risk from utility assets and Tier 3 fire-threat areas are areas where there is an extreme risk from utility assets. As of June 8, 2021, approximately 37 right-of-way miles of SMUD’s transmission lines are in Tier 2 fire-threat areas and approximately 19 right-of-way miles of SMUD’s transmission lines are in Tier 3 fire-threat areas. SMUD is also a member of TANC. As of July 2022, approximately 116.3 right-of-way miles of TANC’s transmission lines are in Tier 2 fire-threat areas and approximately 4.5 right-of-way miles of TANC’s transmission lines are in Tier 3 fire-threat areas. In accordance with its FERC license, SMUD adheres to a FERC-approved Fire Prevention and Response Plan for its UARP facilities. On May 17, 2018, in accordance with State law, SMUD’s Board of Directors determined that the UARP area may have a “significant risk of catastrophic wildfire” resulting from overhead electric facilities and that SMUD’s FERC-approved UARP Fire Prevention and Response Plan meets requirements for presenting wildfire mitigation measures to the Board for its approval.

Wildfire Mitigation. In response to potential wildfire risk, SMUD has implemented and is continuing to implement a series of measures intended to prevent wildfires from occurring, minimize the spread of any fire that does occur and improve the resiliency of its system. These measures include an increase in the degree of sophistication of fuel reduction inside and adjacent to rights-of-ways; installation of Cal Fire-approved exempt material to reduce the risk of sparking; enhanced inspection and maintenance programs; increased use of ignition-resistant construction, including covered conductors and undergrounding of conductors; increased monitoring of and identified responses to fire conditions, including operational procedures for the de-energization of lines during high fire conditions; and elimination of automatic reclosers on SMUD’s transmission lines and on SMUD’s distribution lines in certain areas during fire season.

SMUD’s proactive approach to vegetation management recently has been expanded to include the use of advanced technologies such as Light Detection and Ranging (“LIDAR”) surveys, ortho and oblique that is used to pinpoint tree health and/or condition that may not yet be visible to the naked eye. In addition, SMUD has installed additional weather stations in transmission corridors and substations for increased situational awareness and has continued coordination and collaboration with local agencies and first responders as well as vulnerable populations.

State legislation enacted in 2018 and 2019 (SB 901 and AB 1054, respectively) requires publicly owned utilities (“POUs”) to prepare and present Wildfire Mitigation Plans to their governing boards by January 1, 2020, and annually thereafter. SMUD assembled an enterprise-wide team of subject-matter experts to prepare its plan in compliance with this legislation. SMUD’s initial Wildfire Mitigation Plan (“WMP”) was adopted by the Board in the fourth quarter of 2019, after circulation for public comment and

review of the comprehensiveness of the plan by a qualified independent evaluator. The WMP and evaluator's report were submitted to the State Wildfire Safety Advisory Board (the "WSAB") in 2020. The WSAB was established pursuant to AB 1054 and is charged, among other things, with providing comments and advisory opinions relating to content and sufficiency of POU wildfire mitigation plans and recommendations on how to mitigate wildfire risk.

SMUD reviews its WMP each year, presenting the updated plan to the Board for adoption at duly noticed public meetings. The updated plans and evaluator reports are submitted to the WSAB for advisory opinion and recommendations. SMUD responds to the WSAB's comments regarding SMUD's Wildfire Mitigation Plan as part of its WMP process. SMUD will continue to annually review and update its WMP, conducting a comprehensive review at least every third year.

[SMUD is currently conducting a comprehensive review and update of its WMP and anticipates presenting its 2023-2025 WMP to the Board in second quarter of 2023, after soliciting public input and independent evaluation.]

Wildfire Insurance. Wildfires in the State have not only increased potential liability for utilities, but have also adversely impacted the insurance markets, leading to higher costs for coverage; coverages becoming prohibitively expensive; limited or restricted coverage to certain types of risks; or coverage at insufficient levels. SMUD most recently renewed its general and wildfire liability insurance coverage on June 15, 2022. SMUD increased the commercially-insured portion of its \$255 million wildfire coverage program from \$176 million to \$192.5 million and reduced the self-insured layers and quota share portions of the insurance tower down to \$62.5 million.

In addition, it is expected that SMUD will have a portion of the \$400 million aggregate principal amount of its commercial paper and line of credit program to provide operational flexibility in the event of the occurrence of a wildfire or other operational event. However, SMUD has not covenanted to maintain the availability of the commercial paper program and line of credit program for these purposes and no assurances can be given that the commercial paper and line of credit program will be available at the time of, or during, such an event.

August 2020 Heat Wave

The State experienced a period of prolonged above average temperatures from August 14, 2020 through August 18, 2020. The CAISO was forced to institute rotating electricity outages in the State during this extreme heat wave. SMUD, as a member of BANC, did not have to implement any planned power disruptions. Additionally, SMUD was able to support the CAISO during some hours of the heat wave with both requested emergency assistance and wholesale market sales. SMUD's peak demand between August 14, 2020 and August 18, 2020, varied between 2,874 MW and 3,057 MW, well below SMUD's record peak of 3,299 MW.

September 2022 Heat Wave

The State experienced a period of prolonged above average temperatures from September 5, 2022 through September 8, 2022. On September 6, 2022, SMUD experienced its second highest peak demand of 3,292 MW. SMUD did not have to implement any planned power disruptions.

Storm Damage

In January 2023, SMUD experienced a series of winter storms that brought heavy rains and high winds causing damage to SMUD's grid and widespread outages for SMUD's customers. By the time the

storm response was complete, SMUD had experienced the largest mobilization of personnel and restoration crews in its history. SMUD incurred costs related to removing downed trees, restoring power from downed poles and broken lines, replenishing inventory, communicating with and providing assistance to customers, maintaining IT systems, and coordinating with local emergency agencies. SMUD is pursuing claims with Federal and State agencies. SMUD currently cannot predict financial impacts from the storm damage however such impacts may be material.

Cosumnes Power Plant Outage

On June 5, 2022, the Cosumnes Power Plant was shut down due to a ground fault in the Steam Turbine Generator (“STG”) stator. The ground fault was caused by delamination of insulation of the through bolt. Damage from the ground fault resulted in a rewind and restack of the stator core, replacement of all stator through bolts, and a full rewind of turbine rotor. The Cosumnes Power Plant repairs were completed in February 2023 and the plant returned to service on March 5, 2023. During the extended outage, SMUD shifted generation to the other Local Gas-Fired Plants and the Sutter Energy Center and procured additional energy and resource adequacy capacity. SMUD also requested and received approval from the California Air Quality Board and California Energy Commission to operate one or both of the gas turbines without the STG. During the September 2022 heatwave, both of the gas turbines at the Cosumnes Power Plant were operated without the STG, providing 270 MW at peak.

To mitigate the financial impact of unplanned outages from its thermal assets, SMUD carries commercial property insurance with a business interruption endorsement that can provide up to \$30.8 million of claims recovery per month, with a sub-limit of \$310 million over any 18-month period. Business interruption claims are subject to a 60-day waiting period. SMUD has begun the property damage and business interruption insurance claim process and received a \$50 million advance in December 2022. SMUD is reviewing and submitting claim expenses and expects to reach claim settlement in the third quarter of 2023. The settlement amount is unknown but is expected to be material.

Impacts from COVID-19 Pandemic

While the impact of the COVID-19 pandemic on SMUD has lessened since the height of the pandemic in 2020, SMUD is still experiencing impacts from the pandemic. Compared to weather adjusted load levels, SMUD’s overall load is near or above pre-pandemic levels. Compared to pre-pandemic loads, residential customer load remains higher and commercial customer load has almost recovered. SMUD anticipates that commercial customer load recovery will continue over the next couple of years resulting in continued movement towards pre-pandemic levels, but not a complete recovery as people continue to work from home long-term.

Part of the governmental response to the economic consequences of the pandemic required utility providers (including SMUD) to provide additional grace periods and flexible payment plans for the payment of utility bills or to refrain from pursuing collection remedies for unpaid bills for a period of time. SMUD also implemented a no-shutoff policy through January 2022 under which SMUD did not disconnect power to a customer for non-payment of its electric bill. Beginning in February 2022, SMUD resumed its normal payment, late fee, and disconnection process and began disconnections of unpaid accounts in late April 2022. As a result, SMUD has experienced an increase in delinquencies for customer electric accounts versus pre-pandemic levels. In December 2021, SMUD received \$41 million from the California Arrearage Payment Program (“CAPP”) initial funding, and an additional \$9.9 million in 2022. All funds were applied to delinquent balances. As of March 31, 2023, the total delinquencies for customer electric accounts were \$50.8 million, after the CAPP credit, which is an increase from the February 2020 balance of total delinquencies for customer electric accounts of \$16.9 million.

SMUD also paused the recertification process for existing customers in SMUD’s low-income discount program during the pandemic. The number of customers participating in the low-income assistance program increased by 19,775, or approximately 26% from February 2020 to February 2023. SMUD has resumed the recertification process for existing customers in the low-income discount program in 2023.

While the impacts of the COVID-19 pandemic on SMUD have lessened, if the pandemic and its consequences again become more severe or another similar event occurs, the impacts on SMUD’s financial results and operations could be material.

RATES AND CUSTOMER BASE

Rates and Charges

SMUD’s Board of Directors has autonomous authority to establish the rates charged for all SMUD services. Unlike IOUs and some other municipal utility systems, retail rate and revenue levels are not subject to review or regulation by any other federal, State or local governmental agencies. Changes to SMUD rates only require formal action by the Board of Directors after two public workshops and a public hearing. SMUD is not required by law to transfer any portion of its collections from customers to any local government. SMUD typically reviews and sets rates on a two-year cycle.

2019 Rate Action.

On June 24, 2019, the Board approved a 3.75% rate increase effective January 1, 2020, a 3.00% rate increase effective October 1, 2020, a 2.50% rate increase effective January 1, 2021, and a 2.00% rate increase effective October 1, 2021, for all customer classes. Additionally, the Board approved a restructuring of the commercial rates, including new time periods and an overall increase in the fixed bill components, such as the System Infrastructure Fixed Charge and demand charges, and a corresponding decrease in energy charges, making the restructuring revenue neutral by rate category. To minimize bill impacts, rate categories will be restructured over an 8-year period. Due to the impacts of the COVID-19 pandemic on SMUD’s operations and priorities, on August 20, 2020, the Board approved postponing the implementation of the commercial rate restructure for one year. Customers were transitioned to the new rates in the first quarter of 2022. There is currently pending litigation concerning the adoption of the 2020 and 2021 rates. See “LEGAL PROCEEDINGS – Proposition 26 Lawsuit.”

2021 Rate Action.

On September 16, 2021, the Board approved a 1.5% rate increase effective March 1, 2022 and a 2.0% rate increase effective January 1, 2023 for all customer classes. Additionally, the Board approved the Solar and Storage Rate, the optional residential Peak Pricing Rate, and updates to certain schedules of SMUD’s Open Access Transmission Tariff (“OATT”). The Board also approved a new timeline for the commercial rate restructure transition, and all impacted commercial customers were transitioned to the new rates by the end of the first quarter of 2022.

SMUD also implemented a solar interconnection fee based on the size of solar interconnection and supporting programs such as battery incentives, incentives to enroll in SMUD’s Peak Pricing Rate, battery incentives for Virtual Power Plants, and a program to bring the benefits of solar to under-resourced multi-family communities. These programs and fees are not subject to Board approval.

Rate Stabilization Funds

The Rate Stabilization Fund (the “RSF”) is maintained by SMUD to reduce the need for future rate increases when costs exceed existing rates. At the direction of the Board, amounts may be either transferred into the RSF (which reduces revenues) or transferred out of the RSF (which increases revenues). The Board authorizes RSF transfers on an event driven basis. The RSF includes funds to hedge variations in the volume of energy received from WAPA hydroelectric generation, variation in AB 32 revenue and variations in Low Carbon Fuel Credit (“LCFS”) revenue. As of April, 2023, the balance in the RSF was \$120.1 million, which is approximately 7.3% of annual retail revenue.

Effective July 2008, SMUD implemented the HGA, which is a pass-through rate component to deal with variations in hydroelectric generation from the UARP (see “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Hydroelectric*”). The HGA is designed to increase revenues in dry years when SMUD must buy power to replace hydroelectric generation and return money to the HRSF in wet years when SMUD has more hydroelectric generation than expected. Each year SMUD determines the impact of precipitation variances on projected hydroelectric generation from the UARP. When the precipitation variance results in a deficiency of hydroelectric generation from the UARP, transfers from the HRSF, which was created as a component of the RSF, to SMUD’s available cash, will be made in an amount approximating the cost to SMUD of replacement power (up to 4% of revenues) until the balance in the HRSF is zero. When the precipitation variance results in a projected surplus of hydroelectric generation from the UARP, deposits will be made into the HRSF in an amount approximating the positive impact to SMUD from the surplus hydroelectric generation (up to 4% of revenues) until the balance in the HRSF is equal to 6% of budgeted retail revenue. If the balance in the HRSF is not sufficient to cover transfers that would otherwise be made in the event of a projected deficiency in UARP hydroelectric generation, a 12-month HGA surcharge will automatically be included on customers’ electric bills at a level that generates up to 4% of retail revenue. If the balance in the HRSF is equal to 6% of budgeted retail revenue on any precipitation variance calculation date and the precipitation variance results in a projected UARP hydroelectric generation surplus, the positive impact of the surplus may be used for other purposes at staff’s recommendation, with the approval of the Board, including returned to customers through an electric bill discount up to 4% of retail revenue. SMUD calculates HRSF transfers based on an April-March (water year) precipitation period at Pacific House, California. This National Weather Service precipitation station is used to approximate available water supply to SMUD’s UARP hydropower reservoirs. As of March 31, 2023, precipitation at Pacific House, California totaled 90.83 inches which is above the 50-year rolling median of 50.52 inches.

As of April, 2023, the balance in the RSF and HRSF combined was \$216.5 million. SMUD transferred approximately \$65.4 million into of the HRSF from SMUD’s available cash in April 2023 due to above average precipitation, which increased the balance in the HRSF from \$31 million to approximately \$96.4 million. Although the HRSF and the subaccount of the RSF that hedge variations in the volume of energy received from non-SMUD hydroelectric generation currently have positive balances, below average precipitation could deplete the HRSF and RSF balances to zero.

Low Income Discount

As of February 2023, approximately 95,175 customers received the low-income discount offered by SMUD, which represents approximately 17% of all residential customers. SMUD suspended recertification during the pandemic, but continued to monitor the program to ensure participants continue to be eligible for the discount. In 2022, the total discount was approximately \$31.3 million. As a result of the effects of the COVID-19 pandemic and related economic downturn, SMUD experienced an increase in low-income discount applicants. See “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”

SMUD expanded its programs and services starting in 2016 to help customers with energy assistance, home improvement packages and education. SMUD is creating tailored solutions to best meet the needs of low-income customers. These solutions include free solar panels and inspecting homes to identify energy saving and fuel switching opportunities. As of February 2023, SMUD has performed 27,000 energy retrofits and, in partnership with Grid Alternatives (a non-profit organization that focuses on implementing solar power and energy efficiency for low-income families), 196 customers have benefited from free solar installations. Forty-eight additional homes received solar and energy efficiency through a partnership with Habitat for Humanity of Greater Sacramento. As part of SMUD's Zero Carbon Plan and the focus on building electrification, SMUD has also been ramping up electrification investments for low-income customers. Since 2019, SMUD has assisted more than 1,000 households with electrification upgrades.

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Rate Comparisons

SMUD’s rates remain significantly below those of PG&E and other large utilities throughout the State. The following table sets forth the average charges per kWh by customer class for both SMUD and PG&E. PG&E’s rates reflect their recently approved rate increase effective March 1, 2023.

AVERAGE CLASS RATES

	SMUD Rates (cents/kWh)⁽¹⁾	PG&E Rates (cents/kWh)⁽²⁾	Percent SMUD is Below PG&E⁽³⁾
Residential – Standard	17.96¢	36.27¢	50.5%
Residential – Low Income	12.53¢	23.11¢	45.7%
All Residential	17.10¢	30.50¢	44.0%
Small Commercial (Less than 20 kW)	17.39¢	34.55¢	49.7%
Small Commercial (21 to 299 kW)	16.07¢	33.90¢	52.6%
Medium Commercial (300 to 499 kW)	15.01¢	32.39¢	53.6%
Medium Commercial (500 to 999 kW)	14.08¢	28.00¢	49.7%
Large Commercial (Greater than 1,000 kW)	12.03¢	22.12¢	45.6%
Lighting – Traffic Signals	13.77¢	33.94¢	59.4%
Lighting – Street Lighting	15.64¢	46.15¢	66.1%
Agriculture	15.25¢	31.49¢	51.6%
System Average	15.65¢	29.83¢	47.6%

⁽¹⁾ Projected 2023 average prices for SMUD with rates effective January 1, 2023.

⁽²⁾ PG&E average prices in 2023 reflect rates effective March 1, 2023, per Advice Letter 6863-E- dated February 15, 2023.

⁽³⁾ The rates in the Average Class Rates table are calculated by dividing the total revenue of each class by the total usage of that class in kWh. The actual savings per customer will vary based on their electricity consumption.

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The following table shows a comparison of SMUD’s charges for the average residential usage of 750 kWh per month (based on an average of summer and non-summer) and charges of seven similar neighboring or largest utilities in the State.

STATEWIDE COMPARISON–RESIDENTIAL SERVICE

	Monthly Billing Charge 750 kWh⁽¹⁾⁽²⁾	Percent SMUD is (Below)/Above Utility
Sacramento Municipal Utility District	\$131.40	
Pacific Gas & Electric Company	\$282.25	(53%)
Roseville Electric Utility	\$122.47	7%
Turlock Irrigation District	\$123.70	6%
Modesto Irrigation District	\$144.30	(9%)
Los Angeles Dept. of Water & Power	\$169.76	(23%)
Southern California Edison Company	\$273.21	(52%)
San Diego Gas and Electric Company	\$357.12	(63%)

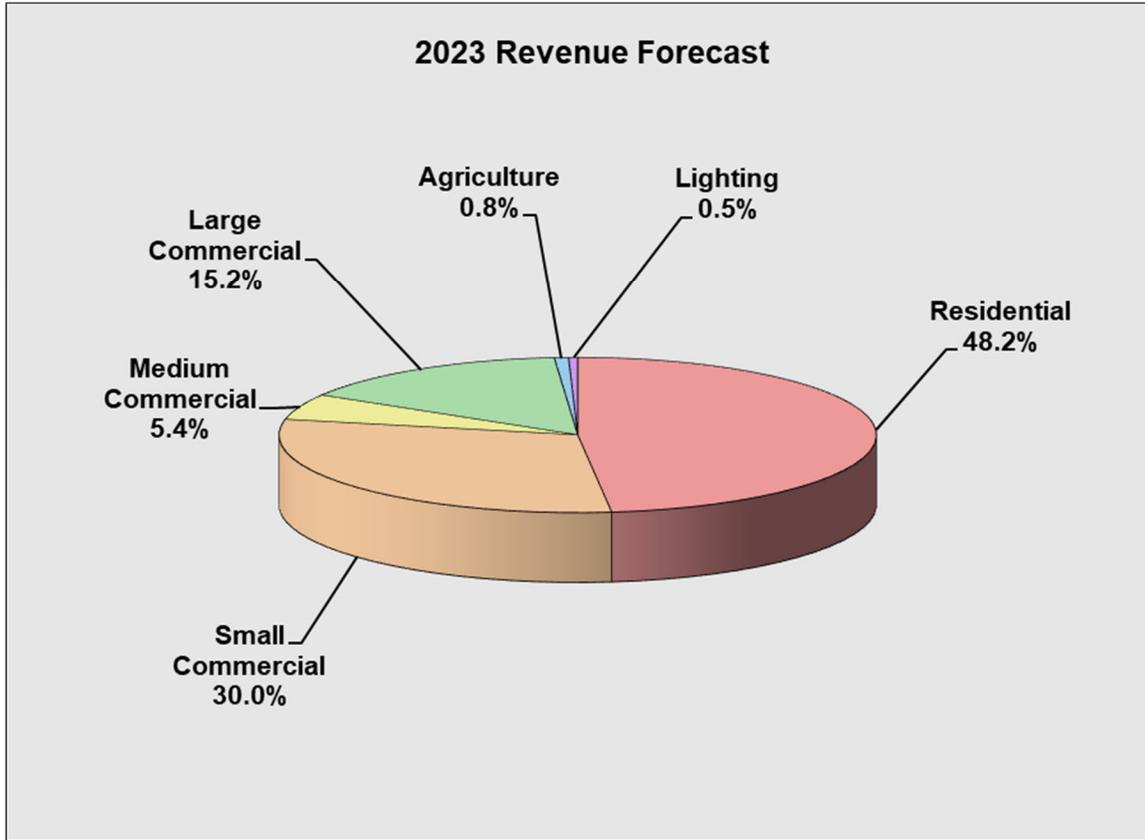
⁽¹⁾ Per individual utility’s published schedules as of March 1, 2023.

⁽²⁾ Average usage of theoretical customer using 750kWh per month.

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Allocation of Revenue by Customer Class

The following chart sets forth the forecast percentage of SMUD revenues from billed sales associated with each customer class.



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Customer Base; Largest Customers

A stabilizing influence on SMUD's revenues is that a substantial proportion is derived from residential customers (48.9% in 2022). Historically, revenue from commercial and industrial consumption has been more sensitive to economic fluctuation. Furthermore, SMUD has no dominant customers that account for a significant percentage of annual revenues. In 2022, no single customer contributed more than 3% of revenues. The top ten customers generated approximately 11% of revenues and the top 30 generated approximately 17%. The following table presents information on SMUD's top ten customers as of December 31, 2022.

SMUD'S LARGEST CUSTOMERS (As of December 31, 2022)

Customer Type	Annual Revenue (\$ millions)	% of Total Revenue
Technology	37.56	2.31%
Government	33.02	2.03%
Government	31.59	1.94%
Government	14.58	0.90%
Government	14.11	0.87%
Communications	9.89	0.61%
Industrial Gases	9.12	0.56%
Government	8.04	0.49%
Grocery	7.37	0.45%
Government	7.29	0.45%
Top 10 Total	172.57	10.59%

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POWER SUPPLY AND TRANSMISSION

Power Supply Resources

The following table sets forth information concerning SMUD’s power supply resources as of March 31, 2023. Capacity availability reflects expected capacities at SMUD’s load center, as well as entitlement, firm allocations and contract amounts in the month of July, which is generally SMUD’s peak month.

POWER SUPPLY RESOURCES (As of March 31, 2023)

Source:	Capacity Available (MW) ⁽¹⁾
Generating Facilities:	
Upper American River Project – Hydroelectric	685
Solano Wind Project – Wind ⁽²⁾	94
Hedge Battery ⁽²⁾	4
Sub-total:	783
Local Gas-Fired Plants:	
Cosumnes Power Plant	570
Carson Project.....	103
Procter & Gamble Project.....	166
McClellan	72
Campbell Soup Project	170
Sub-total:	1,081
Purchased Power:	
Western Area Power Administration (WAPA) ⁽³⁾ ⁽⁴⁾	351
Grady – Wind ⁽²⁾	34
Avangrid (Iberdrola) (PPM) – Wind ⁽²⁾	22
Feed-in-Tariff Photovoltaic – Solar ⁽²⁾	40
Rancho Seco Solar ⁽²⁾	53
NTUA Navajo Drew Solar ⁽²⁾	55
Great Valley – Solar ⁽²⁾	40
Wildflower Solar ⁽²⁾	8
Calpine Geysers – Geothermal	95
CalEnergy – Geothermal	26
Patua (Gradient/Vulcan) – Geothermal.....	12
Other Long-Term Contracts.....	18
ELCC Portfolio Adjustment ⁽²⁾	4
Sutter Calpine Thermal.....	258
Firm Contract Reserves ⁽⁴⁾	18
Committed Short-Term Purchases ⁽⁵⁾	275
Uncommitted Short-Term Purchases	8
Sub-total:	1,314
Total	3,178

⁽¹⁾ Available capacity is the net capacity available to serve SMUD’s system peak load during the month of July.

⁽²⁾ Capacity values shown are based on resource effective load carrying capability modeling.

⁽³⁾ Total includes SMUD’s Base Resource share and WAPA Customer allocations.

⁽⁴⁾ Assumes firm reserves of 5% are included.

⁽⁵⁾ Committed Short-Term Purchases are primarily purchased on a year-ahead to season-ahead basis from various sources.

Note: Totals may not add due to rounding.

Power Generation Facilities

Hydroelectric. The UARP consists of three relatively large storage reservoirs (Union Valley, Loon Lake and Ice House) with an aggregate water storage capacity of approximately 400,000 acre-feet and eight small reservoirs. Project facilities also include eight tunnels with a combined length of over 26 miles and eight powerhouses containing 11 turbines. In addition to providing clean hydroelectric power and operating flexibility for SMUD, the UARP area provides habitat for fish and wildlife and a variety of recreational opportunities, including camping, fishing, boating, hiking, horseback riding, mountain biking and cross-country skiing.

The combined capacity of the UARP is approximately 685 MW at SMUD's load center in Sacramento. Under current licensing and mean water conditions, these facilities are expected to generate approximately 1,600 GWh of electric energy annually, which represents approximately 15% of SMUD's current average annual retail energy requirements. In 1957, the Federal Power Commission (predecessor agency to FERC) issued a license to SMUD for the UARP. This 50-year license was subsequently amended to add and upgrade facilities and now includes all segments of SMUD's hydroelectric facilities located on the South Fork of the American River and its tributaries upstream from the Chili Bar Project (described below). On July 23, 2014, FERC issued to SMUD a new 50-year license for the UARP.

On November 9, 2016 FERC issued an Order authorizing SMUD to construct the South Fork Powerhouse downstream of the UARP's Slab Creek Dam. Construction was substantially completed in the fall of 2020, and the new powerhouse was placed into operation on October 25, 2022, adding 1.8 MW of generation to the UARP's overall capacity.

On June 16, 2021, pursuant to Board authorization, SMUD acquired the Chili Bar Hydroelectric Project which consists of a 7 MW powerhouse, reservoir, dam and spillway, north of Placerville on the South Fork of the American River for approximately \$10.4 million (the "Chili Bar Project"). The Chili Bar Project is immediately downstream from the UARP and operates as the regulating reservoir for the UARP's largest powerhouse. Owning the UARP and the Chili Bar Project enables SMUD to operate the two projects with a holistic approach to license compliance and generation efficiency.

Solano Wind Project. SMUD owns and operates an 87 MW wind project, located in Solano County, known as Solano 2. Solano 2 consist of 29 wind turbine generators ("WTGs") rated at 3 MW each. Energy from the project is collected at 21 kV and transmitted over a dedicated 3-mile overhead system to the SMUD-owned Russell substation. At the Russell facility, the energy is transformed to 230 kV and interconnected to PG&E's Birds Landing Switching Station. Energy deliveries are scheduled through the CAISO.

Solano 3 Project. In 2011 and 2012, SMUD constructed a 128 MW wind project adjacent to Solano Phase 2, known as Solano 3. The Solano 3 project consists of 31 WTGs rated at 1.8 MW and 24 WTGs rated at 3.0 MW. The project interconnects through a 34.5 kV underground collection system to the Russell substation. Like the Solano Phase 2 project, this energy is transformed to 230 kV and delivered through the CAISO.

Solano 4 Project. SMUD is developing the Solano 4 Wind Project on SMUD-owned land near the Solano 3 project, known as the Collinsville and Roberts properties, to install 10 WTGs rated at 4.5 MW, and to remove the Solano 1 turbines and replace them with 9 WTGs rated at 4.5 MW. SMUD received the Cluster II Phase I Study results from the CAISO in January 2019, provided the initial security posting in April 2019, and received the Phase II Study Report in November 2019, furthering the process towards a Large Generator Interconnection Agreement ("LGIA"). SMUD has met all of the CAISO requirements and has executed a LGIA as of June 2021 that will allow for 90.8 MW of capacity at the point of

interconnection. WAPA and PG&E identified upgrades needed to interconnect the Solano 4 Wind Project that may not be complete before 2024. The WAPA impacts have been resolved at no cost. PG&E has an approved project and expects to complete the needed upgrades by May of 2025. In April 2021, SMUD submitted an application for advisory review by the Solano County Airport Land Use Commission (the “Solano ALUC”) of the Solano 4 Wind Project’s consistency with the 2015 Travis Air Force Base Land Use Compatibility Plan (the “Travis Plan”). In May 2021, the Solano ALUC purported to resolve that the Solano 4 Wind Project was inconsistent with the Travis Plan. In August 2021, the Board approved the Project Environmental Impact Report, made findings overriding the Solano ALUC’s finding of inconsistency, made findings there was no alternative to the project, and approved the Solano 4 Wind Project. In September 2021, Solano County filed a writ petition challenging SMUD’s approval of the Solano 4 Wind Project based on procedural environmental, zoning and land use grounds. The parties entered into a settlement agreement on December 14, 2022, and the suit was dismissed on January 10, 2023. The settlement agreement allows for the construction of the Solano 4 Wind Project as planned.

In addition, SMUD applied for and obtained extensions of the Federal Aviation Administration Determinations of No Hazard allowing for construction of the turbines. A contract for the construction of the Solano 4 Wind Project was awarded to Vestas Corporation and the Solano 4 Wind Project is currently under construction. The expected operation date for the Solano 4 Wind Project is May 2024. Realization of the full capacity of the Solano 4 Wind Project may be delayed into the first quarter of 2025 due to the timeframe established for the PG&E required upgrades. SMUD has developed a mitigation plan for the limited interconnection capacity for the first year of operation, in coordination with CAISO and PG&E, of using all of the existing SMUD Solano Russell substation interconnection capacity combined for the dispatch of all the Solano Wind Project. SMUD completed a combined LGIA amendment administrative process, which combines all phases of the Solano Wind Project so it may operate as one project. This was fully executed by SMUD, CAISO, and PG&E on February 27, 2023.

Distributed Solar Photovoltaic. SMUD owns and operates approximately 2 MW of solar photovoltaic generating facilities. These facilities include installations at the Hedge Substation property, SMUD Headquarters, the East Campus Operations Center, and other smaller photovoltaic systems throughout the service area on parking lots.

Hedge Battery. SMUD owns and operates a 4 MW, 8 MWh, battery energy storage system located near the Hedge Substation in South Sacramento. The facility reached commercial operation in January 2023.

Local Gas-Fired Plants. SMUD constructed five local natural gas-fired plants in its service area: the Carson Project, the Procter & Gamble Project, the Campbell Soup Project, McClellan and the Cosumnes Power Plant (each defined below). These five plants are referred to collectively as the “Local Gas-Fired Plants.” These plants are a strategic component of SMUD’s resource mix. In addition to providing SMUD a total capacity of approximately 1,139 MW, the Local Gas-Fired Plants provide SMUD with needed voltage support, operational and load following capability, and the reliability inherent in having power resources located close to loads. With the exception of McClellan, these plants were financed through the issuance of project revenue bonds by separate joint powers authorities (collectively, the “Authorities”). In late 2021, ownership of all of the Local Gas-Fired Plants was transferred to one of the Authorities, SFA. SMUD has entered into long-term agreements with SFA providing for the purchase by SMUD of all of the power from each of the Local Gas-Fired Plants on a take-or-pay basis. This consolidation created operational and administrative efficiencies without changing any of the functionality of the power plants. Although the Local Gas-Fired Plants are owned by SFA, SMUD has exclusive control of their dispatch and manages their operations as part of its overall power supply strategy.

Payments under the power purchase agreements are payable from the revenues of SMUD's Electric System prior to the payment of the principal of or interest on SMUD's Senior Bonds and Subordinated Bonds (each as defined under the caption "CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS" below), as are other maintenance and operation costs and energy payments. For further discussion of SMUD's obligations to make these payments to SFA, see "CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Joint Powers Authorities*."

The following is a brief description of the five Local Gas-Fired Plants:

The Cosumnes Power Plant (the "Cosumnes Power Plant"). The Cosumnes Power Plant is a 612 MW natural gas-fired, combined cycle plant located in the southern portion of Sacramento County adjacent to SMUD's decommissioned Rancho Seco Nuclear Power Plant. Commercial operation of the Cosumnes Power Plant commenced on February 24, 2006. SFA increased the net generating capacity of the facility by 81 MWs via an Advanced Gas Path ("AGP") upgrade. The additional AGP generation was realized after hardware and software upgrades were completed on both units in March of 2019. The Cosumnes Power Plant is owned by SFA, a joint powers authority formed by SMUD and MID. The existing take-or-pay power purchase agreement between SMUD and SFA expires no earlier than when the related bonds have been paid in full (the outstanding related bonds are scheduled to mature on July 1, 2030). On June 5, 2022, the Cosumnes Power Plant was shut down due to a ground fault in the STG stator. The repair was completed in February 2023 and the plant returned to service on March 5, 2023. See "FACTORS AFFECTING THE REGION – Cosumnes Power Plant Outage".

The Carson Cogeneration Project (the "Carson Project"). The Carson Project, a 103 MW natural-gas-fired cogeneration project consisting of separate combined cycle and peaking plants, provides steam to the Sacramento Regional County Sanitation District ("SRCSD") wastewater treatment plant adjacent to the site. The Carson Project was originally owned by the CVFA, a joint powers authority formed by SMUD and the SRCSD. Construction of the Carson Project was completed and the plant began commercial operation on October 11, 1995. The CVFA bonds were defeased in September 2019. In late 2021, ownership of the Carson Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the Carson Project will be in effect until terminated by SMUD.

The Procter & Gamble Cogeneration Project (the "Procter & Gamble Project"). The Procter & Gamble Project, a 182 MW natural gas-fired cogeneration facility, is located in an established industrial area of Sacramento. The initial combined cycle portion of the plant began commercial operation on March 1, 1997. Construction of the peaking plant portion of the Procter & Gamble Project commenced during 2000 and the unit achieved commercial status on April 24, 2001. The Procter & Gamble Project produces steam for use in Procter & Gamble Manufacturing Company's oleochemical manufacturing processes and electricity for sale to SMUD. The Procter & Gamble Project was originally owned by the SCA, a joint powers authority formed by SMUD and SFA, a separate joint powers authority. The SCA bonds were defeased in September 2019. In late 2021, ownership of the Procter & Gamble Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the Procter & Gamble Project will be in effect until terminated by SMUD.

The Campbell Soup Cogeneration Project (the "Campbell Soup Project"). The Campbell Soup Project, a 170 MW natural gas-fired cogeneration project, was completed and began commercial operations on December 4, 1997. Upgrades were implemented during 2000, which increased the plant's peaking capacity to 180 MW, well above its net demonstrated capacity of 159.8 MW. The plant is located in south Sacramento adjacent to the Capital Commerce Center (formerly the Campbell Soup Company food processing facility). The Campbell Soup Project was originally owned by SPA, a joint powers authority formed by SMUD and SFA. The SPA bonds were redeemed in July 2015. In late 2021, ownership of the Campbell Soup Project was transferred to SFA. The take-or-pay power purchase agreement between

SMUD and SFA relating to the Campbell Soup Project (the “Campbell Soup/McClellan PPA”) covers both the Campbell Soup Project and McClellan and will be in effect until terminated by SMUD. As part of the Zero Carbon Plan, SMUD is exploring retiring the Campbell Soup Project in 2025, contingent upon SMUD having sufficient other resources available and grid reliability can be maintained. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

The McClellan Gas Turbine (“McClellan”). McClellan is a 72 MW natural gas-fired simple cycle combustion turbine generating plant at McClellan Business Park in Sacramento. This turbine is connected to SMUD’s electric system and is operated to meet SMUD’s peak-load requirements. McClellan is aligned for remote starting and operation with both black start and fast start capabilities. SMUD constructed the McClellan unit in 1986 as a 50 MW emergency power source for the McClellan Air Force Base. In 2001, following the Air Force Base closure, McClellan was upgraded to 72 MW and converted for SMUD use. In May 2007, SMUD transferred ownership of McClellan to SPA for more efficient operation. SPA did not issue debt related to McClellan. In late 2021, ownership of McClellan was transferred to SFA. SFA passes all costs of operations and maintenance through to SMUD in accordance with the terms of the Campbell Soup/McClellan PPA. In exchange for paying all costs related to McClellan, SMUD receives all of the power generated thereby on a take-or-pay basis. As part of the Zero Carbon Plan, SMUD is exploring retiring McClellan in 2024, contingent upon SMUD having sufficient other resources available and grid reliability can be maintained. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

Fuel Supply

General. SMUD is obligated to arrange for the purchase and delivery of natural gas to the Local Gas-Fired Plants. Management of the natural gas procurement and delivery process is a key focus of SMUD’s reliability and risk policies. Although the natural gas consumption of the power plants for SMUD’s load can vary significantly depending on the season, precipitation, and the market price of power and natural gas, the plants are forecasted to need, on average in 2023, a total of approximately 97,000 Decatherms per day (“Dth/day”) with a daily peak slightly more than 171,000 Dth/day of natural gas. SMUD has implemented a comprehensive strategy to secure a reliable and diversified fuel supply through a variety of agreements for the supply, transportation, and storage of natural gas.

Supply. SMUD hedges a significant portion of its expected gas needs to meet customer power requirements. This includes gas for the Local Gas-Fired Plants and for the Sutter Energy Center. See “Power Purchase Agreements – *Sutter Energy Center*”. This is accomplished through a combination of long-term supply arrangements and an exposure reduction program. The program consists of a primary rolling three-year exposure reduction component, a fuel hedging component on a rolling three-year basis, as well as supplemental fixed calendar year components reaching out up to five calendar years. Long-term arrangements may consist of a combination of physical commodity supply contracts, financial hedges, or options. Natural gas is purchased from a wide variety of producers and marketers at the northern and southern California borders, at Alberta, Canada and from the San Juan and the Rocky Mountain supply basins. SMUD has a number of both fixed-price supply agreements and financial hedging contracts to fix gas costs ranging from one month to several years in duration. Including fixed price biogas contracts as of March 31, 2023, these contracts have hedged the price of approximately 83%, 66% and 55% of SMUD’s forecasted natural gas requirements for 2023, 2024 and 2025, respectively. While the financial effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted.

SMUD has contracted with the Northern California Gas Authority No. 1 (“NCGA”) to purchase an approximate average of 8,700Dth/day over the remaining life of a contract expiring May 31, 2027 (the “NCGA Contract”). Under the NCGA contract, SMUD pays a discounted variable price for the fuel and

anticipates periodically fixing the effective price under separate hedging contracts. Currently the delivery point for the NCGA Contract is the AECO hub in Alberta. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. To increase delivery efficiencies, SMUD expects to exchange the gas delivered at the AECO hub under the NCGA Contract with gas to be delivered at the Malin receipt point beginning in November 2023.

SMUD has also contracted with the Northern California Energy Authority (“NCEA”) to purchase an approximate average of 22,000 Dth/day or to be converted to the approximate value in Megawatt-hours (“MWh”) of electricity over the remaining life of a contract expiring on May 31, 2049. The gas will be delivered to the SMUD system via the Malin receipt point on the PG&E backbone system. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. SMUD will pay a discounted variable price for the fuel and anticipates periodically fixing the effective price under separate hedging contracts.

Renewable Natural Gas Supply. As a component of meeting SMUD’s RPS goals, SMUD procures renewable natural gas and digester gas as fuels to generate renewable electricity from the Cosumnes Power Plant. Descriptions of the renewable natural gas supply agreements are provided below.

In March 2009, SMUD entered into a 15-year contract (that qualifies as renewable energy) with Shell Energy North America (US), L.P. (“Shell Energy”) to purchase up to 6,000 Dth/day of renewable natural gas produced from a landfill project in Texas. SMUD began taking deliveries of this supply in April 2009. In March 2012, SMUD amended the contract with Shell Energy to increase the maximum volumes to 7,300 Dth/day and extended the term by 10 years to March 31, 2034. Currently, the delivery point is PG&E Topock and SMUD is using its long-term transport capacity to deliver it to the Cosumnes Power Plant. In 2016, SMUD entered into a 3-year contract with Shell Energy to sell back the entire volume of renewable natural gas purchased, less 500 Dth/day, to be sold into the vehicle transportation markets. Upon expiration of the initial 3-year contract for the sale of biogas to Shell Energy, SMUD extended the sell back of the entire volume of biogas twice for an additional 3 years with Element Markets (now Anew RNG, LLC), starting in 2020 and 2023.

SMUD contracted with Heartland Renewable Energy, LLC (“HRE”) in December 2009 for a 20-year supply of up to 7,000 Dth/day of renewable natural gas from a digester facility in Colorado. Deliveries began in March of 2014. Currently, the delivery point is Opal, Wyoming and SMUD uses its long-term transport capacity to deliver it to the Cosumnes Power Plant. HRE has not delivered volumes from the project to SMUD since December 2016 due to current litigation with Weld County, Colorado regarding odor and permit issues. EDF Renewables, the majority owner of HRE, notified SMUD in August of 2017 that it is in discussions with a short list of bidders to sell its interests in the facility. In June of 2020, the project was purchased and SMUD’s contract was assigned to the new owner, Platte River Biogas, LLC (“PRB”). SMUD and PRB terminated the contract in the third quarter of 2021.

In September 2011, SMUD and CVFA entered into a “Digester Gas Purchase and Sale Agreement” through which the Carson Project cleans nearly all of the digester gas received from Sacramento Regional County Sanitation District (“SRCSD”) and sells it to SMUD for delivery to the Cosumnes Power Plant. In return, SMUD pays all of the Carson Project’s costs in acquiring, cleaning and making the gas available to SMUD. The Digester Gas Purchase and Sale Agreement expires in September 2025. In late 2021, the Digester Gas Purchase and Sale Agreement, along with the Carson Project was transferred to SFA. The Carson Project is currently receiving, processing and selling up to 1,500 Dth/day with provisions for volume increases over time to 2,500 Dth/day. Digester gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations.

In December 2011, SMUD entered into a 20-year agreement with EIF KC Landfill Gas LLC (“EIF”) to purchase up to 7,050 Dth/day of renewable natural gas produced from multiple landfill projects. SMUD began taking deliveries of this supply in January 2014. Currently the delivery point is Kern River – Opal and SMUD uses its long-term transport capacity to deliver it to the Cosumnes Power Plant. Renewable natural gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations. In April 2022 SMUD entered into a transaction to sell the renewable natural gas purchased into the vehicle transportation markets. The transaction expires in March 2025. In 2023, SMUD entered into a 3-year contract with Anew Climate, LLC (“Anew”) to sell back the entire volume of renewable natural gas purchased, to be sold into the vehicle transportation markets.

AB 2196 is a law that defines the criteria by which existing and future renewable natural gas contracts will qualify for the State RPS program. The CEC adopted a RPS Eligibility Guidebook on April 30, 2013, which includes detailed rules for implementation of AB 2196. SMUD received an updated certificate of eligibility from the CEC in July 2014 for the Cosumnes Power Plant that included the quantities of renewable natural gas from all four contracts. The CEC adopted a revised RPS Eligibility Guidebook (Ninth Edition) on April 27, 2017. This latest guidebook did not change the RPS eligibility of any of the above SMUD renewable natural gas and digester gas contracts, but did simplify reporting requirements for these contracts. When fully delivering, these contracts represent roughly 30% of SMUD’s 2020 RPS requirement.

Gas Transmission

SMUD has satisfied its obligation to deliver natural gas to its power plants by constructing a natural gas pipeline, purchasing an equity interest in two PG&E backbone gas transmission lines, and contracting for capacity on a number of existing interstate natural gas transmission lines.

The Local Pipeline. SMUD constructed and owns a 20-inch, 50-mile natural gas pipeline in the greater Sacramento area (the “Local Pipeline”) that transports gas to all of the Local Gas-Fired Plants except McClellan. The Local Pipeline is interconnected with PG&E’s major State gas transmission lines 300 and 401. Additionally, it may be interconnected with one or more private gas gathering pipelines located in the area, a gas storage project and/or other FERC approved pipelines that may be built in the local area. In conjunction with the construction of the Cosumnes Power Plant, SMUD extended the Local Pipeline to the plant site. The 26-mile extension was completed in 2004. The extension is 24 inches in diameter and was designed to serve both the Cosumnes Power Plant and an additional second phase, if constructed.

PG&E Backbone Gas Transmission Lines 300 and 401. In 1996, SMUD purchased an equity interest in PG&E’s backbone gas transmission lines 300 and 401 (referred to as the PG&E backbone). The total capacity acquired at that time was approximately 85,000 Dth/day and consisted of approximately 43,600 Dth/day of firm gas transport from the California–Oregon border at Malin, Oregon and 44,700 Dth/day from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California. SMUD was also entitled to a share of non-firm capacity, which was approximately 4,360 Dth/day; making the total capacity potentially available to SMUD almost 90,000 Dth/day. This purchase made SMUD a co-owner of the PG&E backbone gas transmission lines 300 and 401 and obligated SMUD to pay PG&E to operate the pipelines on its behalf subject to the terms of the purchase agreement and operating protocols. PG&E reduced operating pressures on Line 300 after PG&E suffered a natural gas explosion in San Bruno, CA in September of 2010. Operating pressures and capacity may also fluctuate due to regulatory and other changes. As of December 1, 2021, SMUD holds a total capacity of approximately 87,000 Dth/day, consisting of approximately 47,572 Dth/day of firm gas transport from the California–Oregon border at Malin, and 39,193 Dth/day of firm gas transport from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California.

SMUD also holds additional backbone capacity under tariff service for 5,000 Dth/day of northern path (Redwood) capacity. This contract expires in June 2023. Currently, SMUD is not planning to renew the contract upon expiration.

Kern River Gas Transmission Company Long Term Agreement. SMUD has an agreement with Kern River Gas Transmission Company for 20,000 Dth/day of firm capacity through April 30, 2028. This capacity gives SMUD access to the Rocky Mountain supply basin at Opal, Wyoming, and connects to PG&E Line 300 (owned in part by SMUD) at Daggett, California.

TransCanada Firm Transmission Service Agreements. SMUD has several agreements with TransCanada Corporation that give SMUD access to Canadian supply from the Alberta basin to Kingsgate, British Columbia and the California-Oregon border at Malin. SMUD has agreements for 22,101 Dth/day at the California-Oregon border at Malin via the Gas Transmission Northwest (“GTN”) pipeline that expires in 2023. SMUD has agreements for approximately 12,000 Dth/day from the Alberta ANG/Foothills pipeline, also expiring in 2023. In order to match the Canadian capacity with the takeaway capacity at Malin, SMUD had an agreement with Foothills Pipeline for approximately 10,000 Dth/day that expired on October 31, 2022. Currently, SMUD is not planning to renew the GTN or the Alberta ANG/Foothills agreements.

SMUD’s diversified portfolio of gas transmission arrangements allow for the purchase of gas from a variety of suppliers and locations, and the opportunity to capitalize on regional price differentials where possible. In addition, its ownership interest in the SMUD/PG&E backbone and Local Pipeline enhances the reliability of SMUD’s gas supply.

Gas Storage

SMUD also employs gas storage as part of its overall fuel supply strategy. Gas storage is useful in helping to balance gas supply, mitigate market price volatility, and provide a reliable supply to meet peak day delivery requirements.

SMUD also has a contract with Lodi Gas Storage, LLC, which began in April 2023 and expires in March 2026, for capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

SMUD has a second contract with Lodi Gas Storage, LLC, which began in April 2022 and expires in March 2024, for additional capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

Power Purchase Agreements

SMUD has a number of power purchase agreements to help meet its power requirements. Some of these agreements are described below.

Western Area Power Administration. Effective January 1, 2005, SMUD entered into a 20-year contract with WAPA. SMUD has entered into a replacement agreement extending the term by 30 years for the period of January 1, 2025 through December 31, 2054. Power sold under this contract is generated by the Central Valley Project (“CVP”), a series of federal hydroelectric facilities in northern California operated by the United States Bureau of Reclamation. The contract provides WAPA’s CVP Base Resource customers (including SMUD) delivery of a percentage share of project generation in return for

reimbursement of an equivalent share of project costs. SMUD's CVP Base Resource share is roughly 25% of project generation and costs. This is expected to be approximately 318 MW of capacity and 661 GWh of energy in an average water year but will vary depending on precipitation. Energy available under the contract is determined by water releases required for water supply and flood control and is then shaped into higher value periods within other CVP operating constraints. More capacity and energy are typically available in spring and summer months and less in fall and winter.

SMUD also has a contract with WAPA expiring December 31, 2024, by which WAPA delivers an additional 200-300 MW per hour from projects located in the Pacific Northwest based on certain contractual parameters. In 2022, SMUD received 1,913 GWh of energy under this contract.

Avangrid (formerly Iberdrola Renewables ("Iberdrola")). SMUD has a contract with Iberdrola that provides SMUD with bundled renewable energy (energy plus RECs). The contract agreement is for 126 GWh of wind power generated in Solano County, California. The SMUD Board approved an extension of the wind contract through June 30, 2025.

Patua Project LLC. In April 2010, SMUD entered into a power purchase agreement with Patua Project LLC ("Patua"), a subsidiary of Gradient Resources, for the delivery of up to 132 MW (expected to be 120 MW nominal power output) of renewable energy from geothermal generation being developed in north central Nevada, from a Gradient Resources project known as the Patua Project. The Patua Project was to have been developed in three phases. Since 2010, the agreed upon capacity has been reduced several times. In December 2013, Phase 1 of the project, which had been reduced to 30 MW, finally achieved commercial operation. In 2014, the parties concluded negotiations on the fourth amendment to the power purchase agreement with Patua, which reduced the total capacity down to 40 MW, extended the commercial operation date of Phase 2 to January 1, 2016, and allowed Patua to add up to 13 MW of solar photovoltaics to supplement geothermal production. In addition, this amendment shifted responsibility to Patua for a portion of the long-term transmission service agreements that have been underutilized due to the project not meeting its targets. In November 2015, the Patua Project was acquired by TL Power, LLC, a wholly owned subsidiary of Cyrq Energy, Inc. ("Cyrq"). In December 2015, Cyrq terminated Phase 2. Upon termination of Phase 2, the contractual right for Cyrq to add solar photovoltaics to supplement geothermal production was reduced to 10 MW. As a result of poor performance during the first year of operation, SMUD reduced its obligation to take power from 30 MW to 25 MW. Performance continued to lag in 2015 and 2016 and SMUD further reduced its obligation to take power from 25 MW to 19 MW.

Renewable Energy Feed-In Tariff. In September 2009, SMUD's Board authorized a feed-in tariff program for the purchase of renewable energy from local renewable energy projects connected to SMUD's distribution system. SMUD's Board authorized connection of up to 100 MW under the feed-in tariff which included standard payment rates and standard purchase terms for power. The feed-in tariff program became effective on January 1, 2010. Under the feed-in tariff, SMUD has executed 20-year term power purchase agreements for solar projects totaling 98.5 MW. Construction and start-up were completed on all projects between 2010 and 2012.

CalEnergy LLC. In August 2014, SMUD entered into a 22-year power purchase agreement with CalEnergy LLC for the purchase of 30 MWs per year of renewable energy from its Salton Sea geothermal facilities. As of July 1, 2017, SMUD began receiving up to 10 MWs from the CalEnergy portfolio, which escalated to the full 30 MWs on May 1, 2020.

Rancho Seco Solar. In October 2015, SMUD entered into a 20-year power purchase agreement with Rancho Seco Solar LLC for the purchase of energy from a 10.88 MW solar PV project sited on SMUD's property at the closed Rancho Seco Nuclear Generating Station. Commercial operation was achieved in August of 2016. Rancho Seco Solar LLC leased the property from SMUD under a land lease

agreement. The output of this project directly serves two large commercial customers that executed agreements with SMUD for retail supply of solar power.

In May 2019, SMUD entered into a 30-year power purchase agreement for an additional 160 MW solar PV project with Rancho Seco Solar II, LLC. The project is located on SMUD-owned property at the closed Rancho Seco Nuclear Generating Station, adjacent to the existing 10.88 MW solar PV project. Construction began in 2019, and the project became commercially operable in February 2021.

Grady Wind Energy. In October 2015, SMUD entered into a 25-year power purchase agreement with Grady Wind Energy LLC (“Grady”) for the purchase of energy from a 200 MW wind project located in New Mexico (the “Grady Project”). The Grady Project began commercial operations on August 5, 2019. Energy from the Grady Project is delivered to CAISO. SMUD purchases 100% of the Grady Project output which includes energy, renewable energy credits, and capacity attributes. SMUD and Grady had a short-term (6-month) agreement spanning the winter 2021-spring 2022 season wherein Grady has the option to pay SMUD to curtail up to 100 MW. This agreement does not affect the remaining term of the agreement.

Great Valley Solar 2, LLC. In January 2017, SMUD entered into a 20-year power purchase agreement with Great Valley Solar 2, LLC for the purchase of energy from a 60 MW solar PV project located in Fresno County, California. The project’s commercial operation date was December 28, 2017.

ARP-Loyalton Cogen LLC. On September 14, 2016, Senate Bill 859 (“SB 859”) was signed into law. Under SB 859, a POU must procure its proportionate share of 125 MWs of renewable energy from biomass plants burning high hazard forest fuels, subject to terms of at least five years. Seven POU’s (SMUD, MID, Turlock Irrigation District (“TID”), Anaheim Public Utilities, Imperial Irrigation District, Los Angeles Department of Water & Power and Riverside Public Utilities, collectively described herein as the “ARP-Loyalton POU’s”) jointly solicited proposals for up to 29 MW of contract capacity for renewable energy to meet the requirements of SB 859. In January 2018, SMUD entered into a 5-year power purchase agreement with ARP-Loyalton Cogen LLC to fulfill 18 MWs of the required 29 MWs with SMUD’s share being just over 23 percent (the “ARP-Loyalton PPA”). See “—Roseburg Forest Product Co.” below for a discussion of the remaining SB 859 capacity. The contract became effective on April 1, 2018. On February 18, 2020, ARP-Loyalton Cogen LLC filed for Chapter 11 bankruptcy and stopped producing and selling energy from the biomass plant. On May 7, 2020, the bankruptcy court approved the sale of the Loyalton facility to Sierra Valley Enterprises, LLC (“SVE”). SVE initially expressed interest in bringing the facility back into service; however, the bankruptcy trustee requested repeated extension of the deadline for SVE to accept or reject the ARP-Loyalton PPA. The latest deadline was April 19, 2023, the date of expiration of the ARP-Loyalton PPA term. As SVE did not resume operations before the end of the ARP-Loyalton PPA term, the ARP-Loyalton POU’s have negotiated a settlement agreement with the bankruptcy trustee (the “ARP-Loyalton Settlement Agreement”). The ARP-Loyalton Settlement Agreement defines funds from the performance security that the ARP-Loyalton POU’s will keep to cover legal and administrative fees, along with a contingency amount to cover potential risk of future damages. Since the ARP-Loyalton POU’s entered into a 5-year agreement to procure compliant biomass and provided SVE the opportunity to accept the ARP-Loyalton PPA and restart operations, the ARP-Loyalton POU’s consider their statutory obligations to have been fulfilled.

Roseburg Forest Products Co. For the remaining SB 859 biomass obligation of 11 MW, SMUD and the other ARP-Loyalton POU’s have entered into a five-year power purchase agreement with Roseburg Forest Products Co. SMUD’s share of the contract capacity is 2.5795 MW, and the plant began operating under the contract on February 26, 2021.

Sutter Energy Center. SMUD entered into an initial two-year contract (with a third-year exercisable option) with Calpine Energy Services, L.P. (“Calpine”) for the ability to schedule up to 258

MWs of energy from Sutter Energy Center. The Sutter Energy Center is a natural gas-fired, combined-cycle facility located in Yuba City, California. The initial contract became effective on April 1, 2018. SMUD exercised its option to extend the contract, which expired November 1, 2020. SMUD entered into a new contract with Calpine for the same 258 MWs of energy that became effective January 1, 2021, and had an original expiration date of January 1, 2024. In December 2021, SMUD extended this contract through December 31, 2026.

Drew Solar, LLC. In June 2018, SMUD entered into a 30-year power purchase agreement with Drew Solar, LLC for the purchase of energy from a 100 MW solar PV project located in Imperial County, California. The project's scheduled commercial operation date was set to be December 31, 2021. The commercial operation date was delayed due to Force Majeure claims surrounding the COVID pandemic and supply chain constraints caused by changes in Federal regulatory requirements. The project began commercially operating on November 3, 2022.

Wildflower Solar. In October 2018, SMUD entered into a 25-year power purchase agreement with Wildflower Solar I, LLC, for the purchase of energy, capacity, and RECs from a 13 MW solar PV project located in Rio Linda, California. The project began commercially operating on December 18, 2020.

Coyote Creek (Formerly Sacramento Valley Energy Center, LLC.) In August 2021, SMUD entered into a 30-year power purchase agreement with Sacramento Valley Energy Center, LLC for the purchase of energy from a 200 MW solar PV and 100 MW four-hour Battery Energy Storage System ("BESS") capacity project located in Sacramento County, California. The project's commercial operation date was expected to be December 31, 2023. The scheduled commercial operation date has been delayed to 2026 due to ongoing development and permitting delays.

SloughHouse Solar, LLC. In September 2021, SMUD entered into a 30-year power purchase agreement with SloughHouse Solar, LLC for the purchase of energy from a 50 MW solar PV project located in Sacramento County, California. The project's commercial operation date was originally expected to be December 31, 2023, but the commercial operation date has been delayed to 2026 due to ongoing development and permitting delays.

Country Acres Solar. In December 2021, SMUD issued a Request for Offers ("RFO") seeking qualified Power Purchase Agreement offers for a utility scale PV with BESS project under development which will interconnect to SMUD's North Area transmission system. The project site is located on over 1,000 acres in Placer County near the city of Roseville. SMUD selected a developer for the power purchase agreement, which is currently expected to be in place by the third quarter of 2023. Development efforts are underway with an expected commercial operation date in late 2025 to early 2026.

Geysers Power Company, LLC. In March 2021, SMUD executed a 10-year power purchase agreement with Geysers Power Company, LLC for 100 MW of capacity from the Geysers geothermal energy plant located in Lake and Sonoma Counties, California. SMUD started to receive deliveries on January 1, 2023.

Transmission Service Agreements

TANC California-Oregon Transmission Project. The 340-mile COTP is one part of a three 500-kV line coordinated system known as the California-Oregon Intertie ("COI"). The COTP is allocated one-third of the 4,800 MW capability of the COI system (see related agreements below). TANC is entitled to use 1,390 MW and is obligated to pay approximately 80% of the operating costs of the COTP. SMUD is a member of TANC and a party to Project Agreement No. 3 ("PA3"), under which it is entitled to 378 MW and obligated to pay on an unconditional take-or-pay basis about 27.5% of TANC's COTP debt service and

operations costs, subject to a “step-up” obligation of up to 25% of its entitlement share upon the unremedied default of another TANC member-participant. In 2009, SMUD entered into a long-term layoff agreement with certain members that increased SMUD’s entitlement by 35 MW. In 2014, SMUD entered into another long-term layoff agreement with certain other members that increased SMUD’s COTP entitlements by 128 MW and amended the 2009 layoff agreement that returned 13 MW to a member. As of December 31, 2018, SMUD was entitled to approximately 528 MW of TANC’s transfer capability for imports and 405 MW for exports, and is obligated to pay approximately 38.6% of TANC’s COTP debt service and operations costs. SMUD’s payments under this contract, like SMUD’s payments under its other power purchase and transmission service agreements, are treated as “Maintenance and Operation Costs” or “Energy Payments” under the resolutions securing the Senior Bonds and Subordinated Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below). SMUD relies on its COTP rights to purchase power, access contingency reserves through the Western Power Pool, and obtain renewable resources to supplement its own resources to serve its load. TANC maintains its own property/casualty insurance program. TANC’s budget for COTP costs, support services and advocacy expenses is about \$45.4 million for 2023. SMUD’s obligation of the TANC budget is about \$17.4 million for 2023.

TANC Tesla-Midway Transmission Service. TANC has a long-term contract with PG&E to provide TANC with 300 MW of transmission service between PG&E’s Midway Substation and the electric systems of the TANC Members (the “Tesla-Midway Service”). SMUD’s share of the Tesla-Midway Service had been 46 MW. As part of the 2009 long-term layoff agreement, SMUD acquired an additional 2 MW of South-of Tesla Principles (“SOTP”) transmission rights for 15 years starting February, 2009 from another TANC member, bringing SMUD’s share of the Tesla-Midway Service to 48 MW.

Bonneville Power Administration. In 2009, SMUD entered into a transmission service agreement with the Bonneville Power Administration (“BPA”) for 60 MW of firm point-to-point transmission service from BPA’s Hilltop substation in north eastern California to the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua geothermal project over BPA’s 230kV transmission lines. In early 2013, in accordance with BPA’s transmission tariff, the transmission service was split into two 30 MW services and deferred as appropriate to better fit the timing of expected commercial operation of Phase 1 and Phase 2 of the Patua Project. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Patua Project LLC.” SMUD submitted another request for the 30 MW of transmission procured for Phase 2 of the Patua Project to split the service into a 10 MW and a 20 MW service, with the 10 MW of service deferred and timed with the originally expected commercial operation date of Phase 2 of the Patua Project. With the termination of Phase 2 of the Patua Project and SMUD’s reduced obligation due to the poor performance of Phase 1 of the Patua Project, much of the transmission reserved for it will no longer be needed. BPA does not have a provision in its transmission tariff for early termination of transmission service. However, the power purchase agreement with Patua requires Patua to cover unused transmission that SMUD has procured for the Patua purchases. On January 1, 2020, SMUD’s transmission rights with BPA were reduced to 19 MW. This now aligns with SMUD’s PacifiCorp transmission rights of 19 MW described in the immediately following paragraph.

PacifiCorp. In 2009, SMUD entered into a transmission service agreement with PacifiCorp for 60 MW of firm point-to-point transmission service across PacifiCorp’s high voltage step-up transformer at the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua Project. In early 2013, in accordance with PacifiCorp’s transmission tariff, the commencement of the 60 MW of transmission service was deferred to fit the timing of first deliveries expected from the 30 MW of Phase 1 of the Patua Project. In 2013, SMUD terminated the 60 MW of transmission service and requested two new transmission services of 30 MW each, with service start dates timed to better fit with the expected start dates of Phase 1

and Phase 2 of the Patua Project. With the reduction in expected output of the Patua Project, SMUD terminated the second 30 MW transmission agreement, and replaced it with a 10 MW transmission service agreement for Phase 2 of the Patua Project. With the termination of Phase 2 of the Patua Project, SMUD terminated the 10 MW Pacificorp transmission service agreement and as a result of the reduced obligation to take power from the Patua Project, SMUD has reduced its remaining Pacificorp transmission service from 30 MW to 19 MW.

Western Area Power Administration. SMUD does not have a direct interconnection of its power system to the COTP. To receive power deliveries that use its COTP rights, SMUD has a long-term transmission service agreement with WAPA for transmission of 342 MW of power from the COTP line (received at WAPA's Tracy or Olinda substations) to SMUD's system. In May of 2011, WAPA completed the Sacramento Voltage Support Transmission Project. Completion of this project has given SMUD an additional 165 MW of transmission service rights on WAPA's system from the COTP at the Olinda Substation to SMUD's system at the Elverta Substation.

Projected Resources

The following tables titled "Projected Requirements and Resources to Meet Load Requirements Energy Requirements and Resources" (the "Energy Table") and "Capacity Requirements and Resources Net Capacity – Megawatts" (the "Capacity Table") describe SMUD's contracted commitments and owned resources available to meet its forecasted load requirements through the year 2032. Resources are shown on an annualized basis with market purchases netted against surplus sales to arrive at a single net position for each year. Because SMUD's available resources do not exactly match its actual load requirements on an hourly basis, there are times during a year when resources available will either exceed or be insufficient to meet SMUD's needs. Expected actual capacity values are included in the tables. These values may differ from measured net demonstrated capacity values of the Local Area Gas-Fired Plants. The table below also includes the impact energy efficiency has on resource requirements as discussed below under "Demand Side Management Programs." See "BUSINESS STRATEGY" and "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Local Gas-Fired Plants.*"

Resources listed in both the Energy Table and the Capacity Table are listed as either renewable or non-renewable. Generally, SMUD follows the CEC guidelines for eligibility requirements. Some of SMUD's renewable resources listed include solar, wind, geothermal, small hydroelectric facilities with a capacity of 30 MW or less, and biomass (representing generation from a fuel comprised of agricultural wastes and residues, landscape and tree trimmings, wood and wood waste).

As in any forecast, assumptions are made. In both the Energy Table and the Capacity Table the WAPA and UARP forecasts assume average water conditions throughout the period. On the capacity table, WAPA and Cosumnes Power Plant renewable capacity is estimated based on the ratio of renewable energy to total WAPA or Cosumnes Power Plant energy. See "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Hydroelectric.*"

The Uncommitted Purchases (Sales) on the tables represent either anticipated future needs or surpluses. Future needs are met well in advance of delivery. They also include both renewable and non-renewable resources.

The Transmission Losses represent reductions in the amount of energy or capacity from the location it was purchased to the point of entering SMUD's electrical system. This amount reduces the Total Resources available to meet the Total Projected Energy Requirements of the electrical system.

Demand Side Management Programs

SMUD's demand-side management initiatives represent an integral element of its total resource portfolio, and are organized into two major components: energy efficiency and load management programs. Energy efficiency offerings include a wide variety of programs and services to customers to retrofit or upgrade existing equipment and fixtures and to install new energy efficiency measures in existing and new construction facilities. Load management allows SMUD to reduce the load on the electric system by cycling residential air conditioning, and calling upon commercial/industrial customers to curtail energy usage when energy is constrained during the summer or system emergencies. Load management programs are projected to allow SMUD to shed approximately 60 MW of peak load in an emergency on a hot day, representing about 2% of SMUD's maximum system peak demand.

The customer "smart meter" system with 2-way communication capability provides information regarding customer usage patterns, which is expected to help SMUD tailor rate designs that provide customers with both the information and ability to manage their energy usage around high energy cost periods.

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**PROJECTED REQUIREMENTS AND RESOURCES TO MEET
LOAD REQUIREMENTS⁽¹⁾
ENERGY REQUIREMENTS AND RESOURCES (GWh)**

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Renewable Resources										
<u>District or Joint Powers Authority Owned:</u>										
UARP - Small Hydro ⁽²⁾	115	93	92	94	94	95	94	94	94	95
Solano Wind	585	738	895	902	902	904	902	902	902	904
Cosumnes-Shell Landfill Gas and Digester Gas ⁽³⁾	48	166	167	582	692	692	692	692	692	692
Total	748	996	1,154	1,578	1,688	1,691	1,688	1,688	1,688	1,691
<u>Purchases</u>										
Western (WAPA) – Small Hydro ⁽²⁾	13	15	15	15	15	15	15	15	15	15
Grady – Wind	933	900	897	897	897	900	897	897	897	900
Avangrid (Iberdrola) (PPM) - Wind	97	98	45	0	0	0	0	0	0	0
Patua (Gradient/Vulcan) – Geothermal	140	147	147	147	147	147	147	147	141	147
Geysers – Geothermal	876	878	876	876	876	878	876	876	876	878
Cal Energy – Geothermal	218	224	223	223	223	224	223	223	223	224
Great Valley SolarShares	167	170	171	171	169	169	169	166	166	167
Rancho Seco PV2	261	332	330	328	327	325	323	322	320	319
Rancho Seco PV	21	22	22	22	22	22	22	22	22	22
Feed-in-Tariff Photovoltaic – Solar	205	209	208	207	206	205	204	203	202	60
Navajo Drew (NTUA) Solar	299	301	298	297	285	276	273	264	271	237
Sloughhouse (Kings Country)	0	0	0	131	124	124	123	122	122	121
Wildflower Solar	31	31	31	31	33	32	33	31	32	32
CoyoteCreek (SVEC) Solar	0	0	0	519	505	502	500	497	495	492
Country Acres	0	0	0	710	706	703	699	696	692	689
Other Long-Term Contracts	145	150	140	29	8	8	6	6	6	6
Future Renewables	0	0	0	0	1,044	1,989	3,351	4,206	4,537	5,870
Total	3,404	3,477	3,403	4,602	5,587	6,521	7,861	8,693	9,018	10,179
Non-Renewable										
<u>District or Joint Powers Authority Owned:</u>										
UARP – Large Hydro ⁽²⁾	2,561	1,614	1,627	1,647	1,618	1,625	1,635	1,625	1,617	1,626
Cosumnes Power Plant	3,428	4,173	4,187	3,685	2,511	1,792	675	530	528	525
Procter & Gamble Project	786	859	809	831	123	43	2	3	5	4
Carson Project	423	480	435	401	3	0	1	3	4	4
Campbell Soup Project	776	929	926	0	0	0	0	0	0	0
McClellan	24	61	0	0	0	0	0	0	0	0
Total	7,998	8,116	7,984	6,565	4,256	3,460	2,313	2,160	2,155	2,160
<u>Purchases</u>										
Western (WAPA) – Large Hydro ⁽²⁾	410	482	485	485	485	485	485	485	485	485
Western (WAPA) Customers (Wheeling) ⁽²⁾	25	37	38	38	38	38	38	38	38	38
Calpine Sutter	1,733	1,695	1,660	1,585	0	0	0	0	0	0
Committed Purchases	0	0	0	0	0	0	0	0	0	0
Total	2,168	2,213	2,182	2,108	523	523	523	523	523	523
Total Resources	14,319	14,803	14,723	14,852	12,053	12,195	12,384	13,064	13,383	14,552
Uncommitted Purchases / (Sales)	(3,382)	(3,773)	(3,606)	(3,599)	(1,067)	(920)	(921)	(1,374)	(1,471)	(2,351)
Transmission Losses (COTP/CVP)	(3)	(11)	(11)	(9)	(82)	(102)	(129)	(146)	(152)	(179)
Total Projected Energy Requirements	10,933	11,018	11,106	11,244	10,903	11,174	11,335	11,544	11,759	12,021
Energy Efficiency (EE)	16	30	44	57	69	79	89	99	108	117
Customer PV	63	121	181	238	793	844	894	943	988	1,033
Expected Electric Vehicle (EV) Charging	(34)	(75)	(143)	(228)	(324)	(430)	(545)	(674)	(803)	(947)
Electric Building (EB)	(12)	(28)	(50)	(77)	(108)	(146)	(201)	(267)	(339)	(412)
Battery Storage (Utility)	0	0	0	0	(121)	(142)	(188)	(225)	(232)	(266)
Battery Storage (BTM)	(0)	(0)	(1)	(1)	(7)	(11)	(17)	(23)	(31)	(38)
Total Gross Energy Requirements before EE, PV and EV Charging	10,966	11,066	11,136	11,233	11,205	11,368	11,368	11,396	11,451	11,508

(1) Totals may not sum due to rounding.

(2) [2023 based on current precipitation levels as of March 31, 2023. All other years assume average precipitation.]

(3) Includes a biomethane contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”).

CAPACITY REQUIREMENTS AND RESOURCES⁽¹⁾
NET CAPACITY – MEGAWATTS

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Load:										
Planned Peak	2,806	2,807	2,813	2,820	2,766	2,784	2,790	2,795	2,800	2,808
Transmission Losses	28	28	28	28	28	28	28	28	28	28
Dispatchable Demand Resource	(71)	(71)	(71)	(71)	(165)	(183)	(202)	(165)	(165)	(165)
Adjusted Peak	2,764	2,764	2,770	2,778	2,629	2,629	2,616	2,658	2,663	2,671
Reserve Margin	415	415	416	417	394	394	392	399	399	401
Adjusted Peak with Reserves	3,178	3,179	3,186	3,194	3,023	3,023	3,008	3,057	3,062	3,072
Renewable Resources										
District or Joint Powers Authority Owned:										
UARP – Small Hydro	45	45	45	45	45	45	45	45	45	45
Solano Wind	94	97	158	202	204	194	197	198	201	201
Cosumnes – Shell Landfill Gas and Digester Gas ⁽²⁾	7	7	26	94	120	120	120	120	120	120
Total	146	148	229	341	369	359	362	363	365	366
Purchases										
Western (WAPA) – Small Hydro	10	10	9	9	9	9	9	9	9	9
Grady – Wind	34	33	33	32	32	33	33	33	29	29
Avangrid (Iberdrola) (PPM) - Wind	22	21	--	--	--	--	--	--	--	--
Patua (Gradient/Vulcan) – Geothermal	12	12	12	12	12	12	12	12	12	12
CalEnergy– Geothermal	26	26	26	26	26	26	26	26	26	26
Geysers – Geothermal	95	95	95	95	95	95	95	95	95	95
Great Value Solar Shares	40	35	33	14	14	15	16	15	14	13
Rancho Seco – PV1	3	3	3	0	1	2	1	1	1	1
Rancho Seco – PV2	50	66	61	16	23	26	19	17	14	11
Feed-in-Tariff Photovoltaic - Solar	40	35	31	7	10	13	6	8	5	5
Wildflower Solar	8	4	4	1	1	2	2	1	1	1
Navajo Solar	55	49	45	14	16	19	16	14	11	9
Sloughhouse Solar	--	--	--	14	15	17	15	14	13	12
CoyoteCreek Solar with Storage	--	--	--	154	147	152	147	145	143	141
CountryAcre with Storage	--	--	--	225	214	219	213	209	206	204
Stand-alone Storage	4	4	4	4	521	521	625	664	844	994
Future Renewables Solar, Wind	--	--	--	--	90	209	215	289	333	346
Future Firm Renewables (Geo)	--	--	--	--	--	12	125	125	125	185
Other Long-Term Contracts	18	18	17	2	2	2	2	2	2	2
Total	414	410	371	625	1,228	1,383	1,576	1,678	1,881	2,093
Non-Renewable										
District or Joint Powers Authority Owned:										
UARP – Large Hydro	640	640	640	640	640	640	640	640	640	640
Cosumnes Power Plant	563	563	544	476	450	450	450	450	450	450
Carson Project	103	103	103	103	100	100	100	100	100	100
Procter & Gamble Project	166	166	166	166	166	166	166	150	150	150
McClellan	72	72	--	--	--	--	--	--	--	--
Campbell Soup Project	170	170	170	--	--	--	--	--	--	--
Total	1,714	1,714	1,623	1,385	1,356	1,356	1,356	1,340	1,340	1,340
Purchases										
Western (WAPA) – Large Hydro	323	309	304	304	304	304	304	304	304	304
Western (WAPA) Customers (wheeling)	19	18	18	18	18	18	18	18	18	18
Sutter Energy Center	258	258	258	258	--	--	--	--	--	--
Firm Contract Reserves ⁽³⁾	18	17	17	17	17	17	17	17	17	17
Committed Purchases	275	--	--	--	--	--	--	--	--	--
Total	892	602	596	596	338	338	338	338	338	338
Total Variable Renewal Diversity Benefit/(Risk)	4	107	124	263	164	131	162	178	199	215
Uncommitted Purchases / (Sales)	7	197	242	(16)	(432)	(544)	(787)	(840)	(1,062)	(1,281)
Total Resources	3,178	3,179	3,186	3,194	3,023	3,023	3,008	3,057	3,062	3,072

⁽¹⁾ [Based on information available as of March 31, 2023]. Totals may not sum due to rounding. [Capacity values for wind, solar, storage, and future variable renewable projects shown are based on resource effective load carrying capability (ELCC) modeling.]

⁽²⁾ [The Cosumnes Power Plant is a 495 MW plant that includes 100 MW capacity attributable to a biogas contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”) and 395 MW capacity from natural gas.]

⁽³⁾ [SMUD assumes that for all firm system purchases, the suppliers will be planning 5% reserves.]

Balancing Authority Area Agreements

Background. SMUD began operating as an independent control area, later termed a Balancing Authority, on June 18, 2002 within the WECC reliability organization's region. This reduced SMUD's exposure to the costs and reliability risks of the CAISO's markets. SMUD expanded its operational footprint beyond SMUD's service territory to include WAPA's electric system, including the MID, Roseville, and Redding service areas (on January 1, 2005) and the COTP (on December 1, 2005). As described further below, SMUD ceased to be the Balancing Authority on April 30, 2011, as BANC took SMUD's place as the Balancing Authority. SMUD remains the operator of the Balancing Authority through a contract with BANC. SMUD administers the contracts with WAPA and TANC to provide specified Balancing Authority-related and other services, and is compensated by WAPA and TANC for its added labor expense. TANC recovers such Balancing Authority services costs as a part of its annual operating budget from the COTP Participants and WAPA recovers its Balancing Authority services costs through its rates for power and transmission service. The agreement with WAPA, among other terms, establishes operating reserve obligations between the parties. WAPA in turn has agreements with electric systems connected to it to assure that such systems also operate reliably (i.e., MID, Roseville and Redding). As a result of the transition to BANC as the Balancing Authority, SMUD assigned or terminated its interconnection and operations agreements with other interconnecting Balancing Authority areas (i.e., CAISO, BPA and TID). BANC is now the party to these agreements as they primarily address only Balancing Authority matters required for compliance with the reliability standards issued by the North American Electric Reliability Corporation ("NERC"), such as emergency assistance arrangements. See also "OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Western Energy Imbalance Market."

Reliability Standards. The Energy Policy Act of 2005 gave FERC authority to enforce reliability standards for the bulk electric system. In June 2007, these standards became mandatory for SMUD and BANC.

In 2022, SMUD and BANC underwent a combined NERC/WECC audit to evaluate compliance with applicable reliability standards. These audits occur every three years. At the conclusion of the audit, regulators determined that neither entity had any compliance violations related to the Operations and Planning or Critical Infrastructure Protection Standards. SMUD and BANC will undergo another NERC/WECC audit sometime in 2025.

Balancing Authority of Northern California. SMUD, MID, Redding and Roseville executed a Joint Exercise of Powers Agreement (the "BANC JPA Agreement") creating BANC on May 8, 2009. BANC became operational on May 1, 2011 as a Balancing Authority and replaced SMUD as the entity responsible for Balancing Authority-related reliability standards. Since that time, the Trinity Public Utilities District and the City of Shasta Lake have also become members of BANC. As provided in the BANC member agreement, liability for penalties associated with such Balancing Authority-related reliability standards are shared on a *pro rata* basis among the members of BANC. SMUD is the Balancing Authority operator under contract and performs Balancing Authority operational functions on behalf of BANC, much as it did when it was the Balancing Authority. The BANC JPA Agreement assigns cost responsibility based on member load within the BANC Balancing Authority, with SMUD representing approximately 70% of the total load.

Power Pool and Other Agreements

Western Power Pool Agreement. The Western Power Pool ("WPP") is an agreement among over 30 utilities and public agencies in the western United States to coordinate contingency reserve sharing, referred to as the WPP Reserve Sharing Program ("RSP"). The RSP permits participants to rely on one

another in the event that any participant experiences a generating resource outage. While SMUD became an RSP participant in 2009, participation is limited to Balancing Authorities, which SMUD relinquished to BANC in 2011. Under the RSP, BANC and TID (also a WPP member) share their reserve amounts and when necessary may call upon WPP reserves using BANC member systems and unused COTP rights. The WPP RSP permits members to operate more efficiently by reducing the contingency reserves that they would otherwise need to have available if they could not rely on each other.

TANC-SMUD OASIS Administration Agreement. SMUD entered into an agreement with TANC to provide OASIS services (transmission sales and scheduling related services in the BANC BA of TANC members' COTP rights) on September 29, 2005. SMUD is compensated for performing these services. TANC and SMUD entered into a letter agreement dated October 25, 2010 to clarify each party's role for regulatory reliability standards compliance responsibilities and take into account SMUD's increased efforts related to supporting TANC's compliance requirements. SMUD and TANC entered into an agreement to transition this service to the Western Area Power Administration, effective on May 1, 2023. Going forward SMUD will only have a minor role in receiving payments and distributing revenues to the TANC members.

Other Agreements with PG&E

Background. SMUD's electric system was originally purchased from PG&E in 1947. SMUD's service area is mostly surrounded by PG&E's service area and the two electric systems are interconnected at SMUD's Rancho Seco and Lake 230-kV substations.

Interconnection Agreement. PG&E and SMUD executed a Replacement Interconnection Agreement ("RIA") which became effective on January 1, 2010. The RIA provides that SMUD and PG&E operate their interconnections reliably, plan their electric systems to meet their load requirements, and avoid or mitigate impacts they cause by certain electric system modifications. The new agreement has a termination date of December 31, 2024, subject to FERC approval.

Generator Interconnection Agreements. SMUD signed a LGIA with CAISO and PG&E for the Solano 3 Wind Project, effective December 16, 2008, with a 50-year term. The Solano 2 Wind Project has interconnection rights granted through a LGIA, also with the CAISO and PG&E. The agreement became effective in January 2010 and has a term of 20 years. On June 3, 2021, SMUD entered into a LGIA with the CAISO and PG&E, for the planned 90.8 MW Solano 4 Wind project with a 10-year term and automatic renewal for successive one-year terms thereafter. On February 27, 2023, SMUD completed a combined LGIA amendment administrative process which combines the Solano 2, 3 & 4 projects into one Solano Wind Project. The original agreement conditions for the individual projects are carried forward with a new combined project maximum production limit of 320.8 MW at the point of interconnection at the Russell Substation.

Other generator interconnection agreements include a Small Generator Interconnection Agreement with PG&E for Slab Creek with a 22-year term which became effective on January 14, 2010, and a Small Generator Interconnection Agreement with PG&E for the Chili Bar Project with a 10-year term which became effective on June 2, 2021.

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SELECTED OPERATING DATA

Selected operating data of SMUD for the four years ended December 31, 2019 through 2022, and for the three months ended March 31, 2023 and March 31, 2022 are presented in the following table.

SMUD SELECTED OPERATING DATA CUSTOMERS, SALES, SOURCES OF ENERGY AND REVENUES

	Three Months Ended March 31,		Year Ended December 31,			
	2023	2022	2022	2021	2020	2019
Customers at End of Period:						
Residential	577,659	573,693	576,471	572,786	568,741	565,103
Commercial and industrial	69,503	69,531	69,512	69,426	68,628	68,203
Other	7,284	7,331	7,290	7,345	7,354	7,406
Total	<u>654,446</u>	<u>650,555</u>	<u>653,273</u>	<u>649,557</u>	<u>644,723</u>	<u>640,712</u>
MWh Sales:						
Residential	1,108,861	1,010,095	4,763,277	4,749,079	4,906,566	4,493,548
Commercial and industrial	1,234,611	1,313,519	5,805,052	5,649,474	5,453,120	5,616,920
Other	14,045	14,272	53,965	54,473	55,590	55,770
Total	<u>2,357,517</u>	<u>2,337,886</u>	<u>10,622,294</u>	<u>10,453,026</u>	<u>10,415,276</u>	<u>10,166,238</u>
Surplus power/out of area sales	<u>989,530</u>	<u>551,317</u>	<u>2,493,651</u>	<u>2,774,907</u>	<u>2,259,991</u>	<u>1,878,205</u>
Total	<u>3,347,047</u>	<u>2,889,203</u>	<u>13,115,945</u>	<u>13,227,933</u>	<u>12,675,267</u>	<u>12,044,443</u>
Sources of Energy Sold MWh:						
Generated by SMUD	1,683,465	1,297,158	4,368,126	6,776,244	6,414,380	7,143,944
Purchased or exchanged	1,773,658	1,679,188	9,162,576	6,884,003	6,691,279	5,324,217
Total	<u>3,457,123</u>	<u>2,976,346</u>	<u>13,530,702</u>	<u>13,660,247</u>	<u>13,105,659</u>	<u>12,468,161</u>
Less System losses and SMUD usage	<u>106,194</u>	<u>87,143</u>	<u>414,757</u>	<u>432,314</u>	<u>430,392</u>	<u>423,718</u>
Total	<u>3,350,929</u>	<u>2,889,203</u>	<u>13,115,945</u>	<u>13,227,933</u>	<u>12,675,267</u>	<u>12,044,443</u>
Gross System peak demand (kW) ⁽¹⁾	1,549,000	1,526,000	3,263,000	3,019,000	3,057,000	2,927,000
Average kWh sales per residential customer ⁽²⁾	1,921	1,762	8,293	8,316	8,650	7,987
Average Revenue per kWh Sold:						
Residential ⁽²⁾ (cents)	14.52	14.34	16.73	16.20	15.27	14.90
Commercial & industrial ⁽²⁾ (cents)	13.91	12.11	13.97	13.95	13.17	12.71

⁽¹⁾ Peak system MW values are measured at the four SMUD interconnection points and exclude SMUD's generation losses. Historical values include the impacts of dispatchable, non-dispatchable, and energy efficiency program capacity savings.

⁽²⁾ The average kWh sales per residential customer and the average revenue per kWh sold are calculated based upon billed and unbilled sales.

Source: SMUD

SELECTED FINANCIAL DATA

SMUD Financial Information

The following table presents selected financial data of SMUD. Under generally accepted accounting principles, data with respect to SMUD's component units, such as the Authorities, is included with that of SMUD. The following presents data for SMUD only and not its component units, such as the Authorities. SMUD's audited financial statements for the years ended December 31, 2022 and December 31, 2021 are included in APPENDIX B attached to this Official Statement. The following unaudited data for SMUD (excluding its component units) is drawn from SMUD's financial records that have been subjected to the auditing procedures applied in the audits of SMUD's and its component units financial statements for the years ended December 31, 2019 through 2022. The selected financial data for the periods ended March 31, 2023 and March 31, 2022 are derived from SMUD's unaudited financial records, which

have been prepared on the same basis as SMUD’s data for the years ended December 31, 2019 through 2022. The selected financial data for the period ended March 31, 2023 are not necessarily indicative of the financial data to be expected for the entire year ending December 31, 2023.

SMUD FINANCIAL DATA⁽¹⁾
(thousands of dollars)

	Three Months Ended March 31,		Year Ended December 31,			
	2023	2022	2022	2021 (Restated)	2020	2019
Summary of Income						
Operating Revenues ⁽²⁾	\$ 466,524	\$ 378,404	\$ 2,138,655	\$ 1,784,290	\$1,582,979	\$1,553,167
Operating Expenses	(489,270)	(376,017)	(2,102,849)	(1,464,069)	(1,397,845)	(1,412,199)
Operating Income (Loss)	(22,746)	2,387	35,806	320,221	185,134	140,968
Interest and Other Income (Expense)	32,593	10,777	124,704	108,788	63,014	(21,113)
Interest Expense	(18,608)	(19,294)	(74,702)	(81,692)	(80,699)	(66,185)
Change in Net Position	<u>\$ (8,761)</u>	<u>\$ (6,130)</u>	<u>\$ 85,808</u>	<u>\$ 347,317</u>	<u>\$ 167,449</u>	<u>\$ 53,670</u>
Selected Statement of Net Position Information						
Net Plant in Service	\$ 3,604,649	\$ 3,413,234	\$ 3,654,725	\$ 3,502,335	\$3,234,208	\$3,187,135
Construction Work in Progress	343,966	409,932	323,499	365,478	460,155	351,584
Electric Utility Plant – Net.....	<u>\$ 3,948,615</u>	<u>\$ 3,823,166</u>	<u>\$ 3,978,224</u>	<u>\$ 3,867,813</u>	<u>\$3,694,363</u>	<u>\$3,538,719</u>
Unrestricted Cash.....	\$ 554,360	\$ 536,534	\$ 591,410	\$ 569,001	\$ 662,155	\$ 451,800
Rate Stabilization Fund.....	\$ 151,118	\$ 193,608	\$ 156,016	\$ 188,992	\$ 168,726	\$ 143,669
Total Assets	\$ 6,297,170	\$ 6,032,532	\$ 6,421,666	\$ 6,096,865	\$5,826,449	\$5,429,137
Net Position	\$ 2,368,958	\$ 2,286,511	\$ 2,377,719	\$ 2,291,910	\$1,944,593	\$1,777,145
Long-Term Debt ⁽³⁾	\$ 2,228,327	\$ 2,378,960	\$ 2,236,824	\$ 2,387,686	\$2,523,921	\$2,166,389
Debt Service Coverage Ratios						
Parity Debt Service Coverage Ratio ..			2.04x	2.59x	2.25x	2.11x
Parity and Subordinate Debt Service Coverage Ratio.....			1.94x	2.47x	2.14x	2.06x

(1) The financial statements of SMUD comprise financial information of SMUD along with its component units, CVFA, SPA, SCA, SFA, NCGA and NCEA. This table includes only financial information of SMUD excluding its component units. Net operating revenues and expenses and Electric Utility Plant and Capitalization of CVFA, SPA, SCA, SFA, NCGA and NCEA are not included in this table, although amounts paid to or received from the Authorities by SMUD are included.

(2) Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund for each full year as follows:

2023 (\$4.9) million through March 31, 2023

2022 (\$33.0) million

2021 \$20.3 million

2020 \$25.1 million

2019 \$47.0 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See “RATES AND CUSTOMER BASE – Rates and Charges” above.

(3) Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

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Financial Information of SMUD and the Authorities

The following table presents a summary of selected financial information for SMUD and the Authorities.

SUMMARY OF FINANCIAL INFORMATION OF SMUD AND THE AUTHORITIES FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021 (thousands of dollars)

	Year Ended December 31, 2022			Year Ended December 31, 2021 (Restated)		
	SMUD	Authorities	Total ⁽¹⁾	SMUD	Authorities	Total ⁽¹⁾
Summary of Income						
Operating Revenues ⁽²⁾	\$ 2,138,655	\$ 166,674	\$ 2,147,334	\$ 1,784,290	\$ 270,694	\$ 1,790,276
Operating Expenses	(2,102,849)	(120,798)	(2,065,652)	(1,464,069)	(250,980)	(1,450,341)
Operating Income	35,806	45,876	81,682	320,221	19,714	339,935
Interest and Other Income	124,704	1,871	90,044	108,788	712	108,114
Interest Expense.....	(74,702)	(26,482)	(101,184)	(81,692)	(27,608)	(109,300)
Change in Net Position.....	\$ 85,808	\$ 21,265	\$ 70,542	\$ 347,317	\$ (7,182)	\$ 338,749
Selected Statement of Net Position Information						
Net Plant in Service	\$3,654,725	\$ 285,346	\$3,653,281	\$3,502,335	\$ 307,755	\$3,523,243
Construction Work in Progress.....	323,499	24,259	347,758	365,478	1,819	367,297
Electric Utility Plant – Net	\$3,978,224	\$ 309,605	\$4,001,039	\$3,867,813	\$ 309,574	\$3,890,540
Unrestricted Cash	\$ 591,410	\$ 36,454	\$ 627,864	\$ 569,001	\$ 61,375	\$ 630,376
Rate Stabilization Fund	\$ 156,016	--	\$ 156,016	\$ 188,992	--	\$ 188,992
Total Assets	\$6,421,666	\$1,133,461	\$7,191,063	\$6,096,865	\$1,179,848	\$6,916,205
Net Position.....	\$2,377,719	\$ 271,836	\$2,366,803	\$2,291,910	\$ 286,890	\$2,296,261
Long-Term Debt ⁽³⁾	\$2,236,824	\$ 787,215	\$3,024,039	\$2,387,686	\$ 826,171	\$3,213,857

⁽¹⁾ Financial information for SMUD and the SMUD JPAs (CVFA, SPA, SCA, SFA, NCGA and NCEA) include intercompany balances. The financial information reflects balances after the elimination of intercompany accounts including Authorities distributions to SMUD of \$36.5 million in 2022 and \$1.4 million in 2021.

⁽²⁾ Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund as follows:
2022 (\$33.0) million
2021: \$20.3 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See "RATES AND CUSTOMER BASE – Rates and Charges" above.

⁽³⁾ Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

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Management's Discussion of SMUD's Operating Results

Three Months Ended March 31, 2023 (Unaudited). For the three months ended March 31, 2023, SMUD reported a decrease in net position of \$8.8 million as compared to a decrease of \$6.1 million for the three months ended March 31, 2022.

Operating revenues were \$88.1 million higher than 2022. This was primarily due to higher sales of surplus power (\$47.1 million), sales to customers (\$29.0 million), and transfers from the rate stabilization fund (\$9.3 million).

Operating expenses were \$113.3 million higher than 2022. This was primarily due to higher purchased power expenses (\$42.7 million), amortization of pension and OPEB (\$19.5 million), transmission and distribution maintenance expenses (\$12.6 million), administrative and general expenses (\$11.5 million), depreciation expense (\$9.7 million), production expenses (\$4.1 million), production maintenance expenses (\$3.5 million), customer service and information expenses (\$3.3 million), public good expenses (\$2.6 million), and customer accounts expenses (\$2.0 million).

Non-Operating income was \$21.8 million higher than 2022. This was primarily due to a gain on land sale (\$14.3 million), higher interest income (\$6.0 million), and unrealized holding gains (\$2.6 million) offset by investment expenses (\$2 million).

Interest expense decreased \$0.7 million from 2022.

Year Ended December 31, 2022. For the year ended December 31, 2022, SMUD reported an increase in net position of \$85.8 million as compared to an increase of \$347.3 million for 2021.

Operating revenues were \$354.4 million higher than 2021. This was primarily due to higher sales to customers (\$130.7 million), sales of surplus gas (\$96.0 million), sales of surplus power (\$62.2 million), transfers from the RSF (\$24.3 million), customer fees (\$9.5 million), AB 32 revenue (\$4.9 million) and LCFS revenue (\$2.2 million), partially offset by lower gain on sale of carbon allowance futures (\$3.7 million) and transfers to the RSF (\$28.9 million).

Operating expenses were \$638.8 million higher than 2021. This was primarily due to higher purchased power expenses (\$369.6 million), amortization of pension and OPEB (\$126.9 million), production operating expenses (\$114.0 million), transmission and distribution maintenance expenses (\$23.3 million), depreciation expenses (\$8.9 million), transmission and distribution operating expenses (\$8.8 million), public good expenses (\$7.7 million), customer service and information expenses (\$4.5 million), and production maintenance expenses (\$2.8 million), partially offset by lower administrative and general expenses (\$30.4 million).

Non-Operating income increased by \$15.9 million primarily due to higher investment income (\$19.7 million), partially offset by unrealized holding losses (\$3.7 million), closeout of escrow account (\$2.8 million), higher fee based product costs (\$1.9 million), and loss on asset retirements (\$1.9 million).

Interest expense decreased \$7.0 million from 2021.

Year Ended December 31, 2021. For the year ended December 31, 2021, SMUD reported an increase in net position of \$347.3 million as compared to an increase of \$167.4 million for 2020.

Operating revenues were \$201.3 million higher than 2020. This was primarily due to higher sales to customers (\$70.1 million), sales of surplus gas (\$65.4 million), sales of surplus power (\$47.1 million),

transfers from the RSF (\$18.2 million), AB 32 revenue (\$17.9 million) and gain on sale of carbon allowance futures (\$3.1 million), partially offset by transfers to the RSF (\$13.4 million) and lower public good revenue (\$3.5 million).

Operating expenses were \$66.2 million higher than 2020. This was primarily due to higher production operating expenses (\$89.6 million), purchased power expenses (\$47.0 million), and depreciation expenses (\$37.8 million), partially offset by lower amortization of pension and OPEB (\$84.2 million), public good expenses (\$10.7 million), customer accounts expenses (\$6.8 million) and transmission and distribution maintenance expenses (\$5.5 million).

Non-Operating income increased by \$45.8 million primarily due to California Arrearage Payment Program funding (\$41.4 million), a settlement related to Rancho Seco damages (\$15.0 million), higher investment income (\$11.5 million), higher contributions in aid of construction (\$4.0 million), lower legal settlement costs (\$2.2 million), offset by dissolution of RBC CSCDA gas prepay contract (\$10.9 million), lower insurance proceeds (\$8.6 million), lower interest income (\$6.9 million), lower unrealized holding gains (\$4.0) and lower distributions from the JPAs (\$2.6 million).

Interest expense increased \$1.0 million from 2020.

Regulatory Assets. In accordance with Governmental Accounting Standards Board (“GASB”) No. 62, “Regulated Operations,” SMUD defers, as regulatory assets, certain types of expenditures. These assets are amortized and collected through future rates.

As of December 31, 2022, SMUD had a total of \$764.2 million recorded for regulatory assets. Regulatory assets associated with costs related to implementation of GASB No. 68, which requires SMUD to record a net pension liability was \$340.5 million and deferred outflows related to GASB No. 68 was \$86.6 million at December 31, 2022. Regulatory assets associated with costs related to implementation of GASB No. 75, which requires SMUD to record a net Other Post Employment Benefit (OPEB) liability was \$281.0 million and deferred outflows related to GASB No. 75 was \$19.2 million at December 31, 2022. Regulatory assets associated with Rancho Seco decommissioning costs totaled \$83.9 million at December 31, 2022. Nuclear fuel storage costs and non-radiological decommissioning costs have been collected in rates since 2009. For a complete description of these regulatory assets, see Note 8 (Regulatory Deferrals) to SMUD’s financial statements.

The Board has authorized the deferral of any charges or credits that result from the change in valuation of ineffective hedges that should be reported as Investment Revenue/Expense on the Statements of Revenues, Expenses and changes in net position. The Board’s resolution establishes that such charges or credits are not included in rates based on market value changes but are included in rates when the underlying transactions occur. Therefore, under GASB No. 62, “Regulated Operations,” any such changes are included in the Statement of Net Position as regulatory assets or liabilities. For a complete description of these derivative financial instruments, see Note 9 (Derivative Financial Instruments) to SMUD’s financial statements.

RANCHO SECO DECOMMISSIONING

Overview. The 913 MW Rancho Seco Nuclear Power Plant (“Rancho Seco”) began Nuclear Regulatory Commission (“NRC”) licensed operations in 1974. In June 1989, the electorate of SMUD voted against allowing SMUD to continue to operate Rancho Seco as a nuclear generating facility, and the plant was shut down. In 1991, SMUD submitted a report (the “Financial Assurance Plan”) providing required financial assurance to the NRC that SMUD will have sufficient funds available to pay for the cost of decommissioning. On March 17, 1992, the NRC granted SMUD a change from an operating to a

possession-only license for Rancho Seco that relieved SMUD from compliance with a number of NRC regulations applicable to operating nuclear power plants. SMUD also filed a proposed decommissioning plan with the NRC (the “Decommissioning Plan”), which was approved in March 1995.

After the decommissioning efforts began, no suitable disposal option was available to SMUD for the Class B and Class C low level radioactive waste generated during the plant decommissioning. With the used nuclear fuel stored onsite requiring oversight staff, SMUD opted to store the Class B and Class C radioactive waste in an existing interim onsite storage building until a suitable disposal option was available. In November 2007, the possession-only license for Rancho Seco was amended to update the Decommissioning Plan to terminate the possession-only license for the Class B and Class C waste in two phases. Phase I of the decommissioning was completed at the end of 2008. Following verification of the site conditions, SMUD submitted a request to the NRC to reduce the licensed facility from 2,480 acres to the interim onsite storage building and about one acre surrounding it. The request was approved by the NRC in September 2009. Phase II of decommissioning included the approximately two-acre interim storage building containing the Class B and Class C radioactive waste and surrounding area. In September 2013, SMUD entered into a contract with the operator of the low-level radioactive waste disposal facility located in Andrews, Texas. Shipment of the Class B and Class C radioactive waste for disposal was completed in November 2014. SMUD conducted additional clean-up activities and radiological surveys, which were followed by NRC confirmatory surveys. The results of these surveys demonstrated unit dose criteria well below NRC release criteria, and the NRC approved the Phase II area for unrestricted use. On September 21, 2017, SMUD formally requested the termination of the possession-only license. On August 31, 2018, the NRC officially terminated SMUD’s possession-only license for the remaining Class B and Class C waste at Rancho Seco.

As part of the Decommissioning Plan, the nuclear fuel and Greater Than Class C (“GTCC”) radioactive waste is being stored in a dry storage facility (the Independent Spent Fuel Storage Installation or “ISFSI”) constructed by SMUD, adjacent to the former reactor facility. The NRC has separately licensed this facility. The DOE, under the Nuclear Waste Policy Act of 1982, is responsible for permanent disposal of used nuclear fuel and GTCC radioactive waste. SMUD has a contract with the DOE for the removal and disposal of this waste. The DOE was to have a waste repository operating by 1998, but has experienced significant and ongoing delays. The Nuclear Waste Policy Act designates Yucca Mountain in Nevada as the final and exclusive repository for the nation’s used nuclear fuel. The DOE discontinued the Yucca Mountain license review activities in 2010, but after a court ordered the NRC to resume its review in 2013, the NRC published its final safety evaluation report in 2015. The final safety report, and the final environmental impact statement, concluded that the proposed repository would be safe and environmentally sound for one million years.

Nevertheless, seeking alternatives to Yucca Mountain, the Blue-Ribbon Commission on America’s Nuclear Future delivered its final report in January 2012 with several recommendations. The Department of Energy (the “DOE”) responded to the recommendations by issuing a report in January 2013 (Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste). Key to both documents is a focus on used fuel from decommissioned sites including Rancho Seco. The DOE report accepts most of the Blue-Ribbon Commission recommendations, and contains timelines for fuel management options which proposed removing the fuel from Rancho Seco as early as 2021. However, any progress on the strategies proposed by the DOE is dependent on legislative action by Congress. With no legislative action taken to date, the 2021 projected date for fuel removal slips year-for-year. Therefore, SMUD cannot determine at this time when the DOE will fulfill its contractual obligations to remove the nuclear fuel and GTCC waste from the Rancho Seco facility. In the meantime, SMUD continues to incur costs of approximately \$5 to \$6 million per year for storage of used nuclear fuel at the ISFSI. SMUD has filed a series of successful lawsuits against the federal government for recovery of past spent fuel costs, with recoveries to date from the DOE in excess of \$104 million. SMUD plans to continue pursuing cost

recovery claims to ensure it is reimbursed for all such costs in the future. The ISFSI will be decommissioned, and its license terminated after the fuel and GTCC is removed.

Financial Assurance Plan. In accordance with the Financial Assurance Plan, SMUD established and funded an external decommissioning trust fund currently held by Wells Fargo Bank (the “Decommissioning Trust Fund”). Pursuant to the Financial Assurance Plan, SMUD made the final deposit into the Decommissioning Trust Fund in 2008. Additional deposits are not expected but will be made if increased cost estimates or reduced fund interest earnings require it. In 2011, the NRC began requiring that SMUD demonstrate financial assurance for decommissioning the ISFSI as well as the former power facility, increasing the overall cost for decommissioning Rancho Seco. The estimated total cost for decommissioning the ISFSI was approximately \$6.5 million on December 31, 2022. The decommissioning cost estimate is required to be updated every three years. As of December 31, 2022, the balance of the Decommissioning Trust Fund was \$8.98 million, excluding unrealized gains and losses. Based on the current decommissioning cost estimate and the value of the fund, SMUD’s existing Decommissioning Trust Fund provides sufficient funds to complete decommissioning and terminate the ISFSI license.

In addition to these costs, SMUD also estimates that it would cost approximately \$13.1 million to restore the site to make it available for other SMUD uses with some major structures remaining intact. Site restoration is not a legal requirement. No site restoration is currently underway.

EMPLOYEE RELATIONS

SMUD has approximately 2,335 employees, most of whom are covered by a civil service system. SMUD is a contracting member of the California Public Employees’ Retirement System (“PERS”). Approximately 50% of SMUD’s work-force is represented as to wages, hours and other terms and conditions of employment, by one of three recognized employee organizations, the International Brotherhood of Electrical Workers (“IBEW”) Local 1245, the Organization of SMUD Employees (“OSE”), and the SMUD Public Safety Officers’ Association (“PSOA”). The remaining 50% of SMUD’s work-force, which includes managers, professional, administrative, supervisory, confidential and security staff, is unrepresented.

SMUD negotiated a four-year Memoranda of Understanding (“MOU”) with IBEW and the OSE, effective January 1, 2022, through December 31, 2025. Both contracts contain a no-strike/no-lockout clause effective during the life of the agreements. SMUD has an MOU with PSOA effective through December 31, 2026. SMUD has experienced only one labor interruption, which occurred in January 1980 that lasted four days.

RETIREMENT BENEFITS AND POST-EMPLOYMENT MEDICAL BENEFITS

Pension Plans

SMUD participates in PERS, an agent multiple-employer public employee defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. Benefit provisions and all other requirements are established by State statute and SMUD policies. The pension plan provides retirement benefits, survivor benefits, and death and disability benefits based upon employees’ years of credited service, age, and final compensation.

As of June 30, 2021, the last actuarial valuation date for SMUD’s plan within PERS, the market value of the SMUD plan assets was \$2.51 billion. The plan is 100.1% funded on a market value of assets

basis, an increase of 21.0% compared to the June 30, 2020 funded status based on the market value of assets.

As an employer, SMUD is required to contribute a percentage of payroll each year to PERS to fund SMUD's plan based on actuarial valuations performed by PERS. PERS collects the normal cost based on a percentage of payroll and the unfunded liability portion is based on a dollar amount. SMUD also makes partial contributions required of SMUD employees on their behalf and for their account. At the PERS fiscal year ended June 30, 2022, SMUD's required employer contribution rate for normal cost was 9.0% of payroll and the unfunded liability contribution was \$36.3 million. During 2022, SMUD contributed \$52.7 million to PERS (including SMUD's contributions to cover required employee contributions), and SMUD employees paid \$16.5 million for their share of the PERS contribution.

For the fiscal years ending June 30, 2023 and June 30, 2024, SMUD is required to contribute 8.9% and 9.6% of payroll for normal costs and \$22.4 million for fiscal year ending June 30, 2023 for the unfunded liability contribution. There is no estimated employer contribution to the unfunded liability for fiscal year ending June 30, 2024. Assuming no amendments to the plan and no liability gains or losses (which can have a significant impact), PERS has projected that SMUD will be required to contribute 9.5% of payroll to the plan for normal costs and no employer contribution for the unfunded liability for the fiscal year ending June 30, 2025, not including SMUD contributions to cover required employee contributions. The amount SMUD is required to contribute to PERS is expected to increase in the future. The actual amount of such increases will depend on a variety of factors, including but not limited to investment returns, actuarial methods and assumptions, experience and retirement benefit adjustments.

SMUD has the option to prepay an annual lump sum payment to PERS for the unfunded accrued liability portion only (not including SMUD contributions to cover required employee contributions). SMUD made an annual lump sum prepayment of \$35.1 million, and also voluntarily made an additional payment of \$56.3 million, for the unfunded accrued liability for the fiscal year ended June 30, 2022. SMUD also made an annual lump sum prepayment of \$19.5 million, and voluntarily made an additional payment of \$2.9 million for the unfunded accrued liability for the fiscal year ending June 30, 2023.

While SMUD has some ability to adjust the retirement benefits provided to its employees, PERS determines the actuarial methods and assumptions used with respect to assets administered by PERS (including the SMUD plan assets) and makes the investment decisions with respect to such assets. For a description of such actuarial methods and assumptions (including the smoothing conventions used by PERS when setting employer contribution rates) and investments, see the comprehensive annual financial report of PERS (SMUD's plan is part of the Public Employees' Retirement Fund of PERS) available on its website at www.calpers.ca.gov. SMUD cannot guarantee the accuracy of such information and neither the comprehensive annual financial report of PERS nor any other information contained on the PERS website is incorporated by reference in or part of this Official Statement. Actuarial assessments are "forward-looking" information that reflect the judgment of the fiduciaries of the pension plans, and are based upon a variety of assumptions, one or more of which may prove to be inaccurate or be changed in the future. Actuarial assessments will change with the future experience of the pension plans.

GASB issued statement No. 68 "Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27" ("GASB No. 68"). The primary objective of GASB No. 68 is to improve accounting and financial reporting by state and local governments for pensions. Under GASB No. 68, SMUD is required to report the net pension asset or net pension liability (i.e., the difference between the total pension liability and the pension plan's net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. GASB No. 68 separates financial reporting from funding requirements for pension plans. The net pension

liability as of December 31, 2022 is \$235.5 million and the net pension asset as of December 31, 2021 is \$27.7 million.

SMUD provides its employees with two cash deferred compensation plans: one pursuant to Internal Revenue Code (“IRC”) Section 401(k) (the “401(k) Plan”) and one pursuant to IRC Section 457 (the “457 Plan” and collectively, the “Plans”). The Plans are contributory plans in which SMUD’s employees contribute the funds. Each of SMUD’s eligible full-time or permanent part-time employees may participate in either or both Plans, and amounts contributed by employees are vested immediately. Such funds are held by a trustee in trust for the employees upon retirement from SMUD service and, accordingly, are not subject to the general claims of SMUD’s creditors. SMUD makes annual contributions to the 401(k) Plan on behalf of certain employees pursuant to a memorandum of understanding with both of its collective bargaining units. SMUD matches non-represented employee contributions to the 401(k) Plan up to a set amount. SMUD also makes limited discretionary contributions to non-represented employees hired after January 1, 2013, which contributions fully vest after five years. Prior to 2022, SMUD did not match employee contributions, nor make contributions on behalf of its employees to the 457 Plan. Beginning in 2022, SMUD makes annual contributions to the 457 Plan on behalf of certain employees and matches employee contributions up to a set amount pursuant to a memorandum of understanding with one of its collective bargaining units. SMUD made contributions to both Plans of \$7.0 million in 2022 and to the 401(k) Plan of \$6.1 million in 2021. Participating employees made contributions into both Plans totaling \$32.4 million in 2022 and \$30.6 million in 2021.

Other Post-Employment Benefits

SMUD provides post-employment healthcare benefits, in accordance with SMUD policy and negotiated agreements with employee representation groups in a single employer defined benefit plan, to all employees who retire from SMUD, and their dependents. SMUD also provides post-employment healthcare benefits to covered employees who are eligible for disability retirement. SMUD contributes the full cost of coverage for retirees hired before January 1, 1991, and a portion of the cost based on credited years of service for retirees hired after January 1, 1991. SMUD also contributes a portion of the costs of coverage for these retirees’ dependents. Retirees are required to contribute the portion that is not paid by SMUD. The benefits, benefit levels, retiree contributions and employer contributions are governed by SMUD and can be amended by SMUD through its personnel manual and union contracts.

SMUD’s post-employment health care benefits are funded through the PERS California Employers’ Retiree Benefit Trust (“CERBT”), an agent multiple-employer plan. The funding of a plan occurs when the following events take place: the employer makes payments of benefits directly to or on behalf of a retiree or beneficiary; the employer makes premium payments to an insurer; or the employer irrevocably transfers assets to a trust or other third party acting in the role of trustee, where the plan assets are dedicated to the sole purpose of the payments of the plan benefits, and creditors of the government do not have access to those assets.

SMUD has elected to contribute the normal costs to the CERBT but annually receive reimbursement for cash benefit payments from the CERBT. In 2023, SMUD’s contribution for the normal costs to CERBT is \$8.6 million. In 2022 and 2021, SMUD decided to forgo making a contribution for the normal costs to the CERBT because there was a net OPEB asset at December 31, 2021 and December 31, 2020. SMUD can elect to make additional contributions to the trust. During 2022 and 2021, SMUD made healthcare benefit contributions by paying actual medical costs of \$24.5 million and \$24.1 million, respectively. During 2022 and 2021, SMUD received a \$23.3 million reimbursement for cash benefit payments from the CERBT each year.

At June 30, 2022 and 2021, SMUD estimated that the actuarially determined accumulated post-employment benefit obligation was approximately \$381.7 and \$398.2 million, respectively. At June 30, 2022 and 2021, the plan was 97.9% and 113.1% funded, respectively.

SMUD’s actuary uses PERS economic and other assumptions as the basis for the calculation of the post-employment benefit obligation. The actual accumulated post-employment benefit obligation will vary substantially if such PERS assumptions, such as interest rate and life expectancy, among others, prove to be inaccurate or different than SMUD’s actual experience. Although SMUD believes that such assumptions and estimates are reasonable, no assurance can be given that any such assumptions will prove to be accurate, or that SMUD’s actual accumulated post-employment benefit obligation will not materially exceed its estimates. Additional information is available in Note 15 (Other Postemployment Benefits) and “Required Supplementary Information” to SMUD’s consolidated financial statements.

GASB previously issued SGAS No. 75 “Accounting and Financial Reporting for Postemployment Benefits Other than Pensions”. The primary objective of GASB No. 75 is to improve accounting and financial reporting by state and local governments for post-employment benefits other than pensions (“OPEB”). Under GASB No. 75, SMUD is required to report the net OPEB asset or net OPEB liability (i.e., the difference between the total OPEB liability and the OPEB plan’s net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. The net OPEB liability as of December 31, 2022 is \$6.8 million and the net OPEB asset as of December 31, 2021 is \$57.5 million.

CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS

Estimated Capital Requirements

SMUD has a projected capital requirement of approximately \$2.70 billion for the period 2023 through 2027 as shown in the table below. Approximately 60% of this requirement is anticipated to be funded with internally generated funds and cash on hand.

Special projects include costs relating to construction of large substations and the potential construction of Solano Phase 4. The Estimated Capital Requirements table below includes \$207 million for Solano Phase 4. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Solano 4 Project.”

ESTIMATED CAPITAL REQUIREMENTS (Dollars in Thousands)

	Service Area and Other System Improvements Including Distribution System	Improvements to Existing Generation Plant	General Plant	Special Projects	Total Capital Requirements
2023	\$150,334	\$57,763	\$78,675	\$207,427	\$494,199
2024	195,581	40,608	97,225	216,229	549,643
2025	247,528	100,303	107,766	94,651	550,248
2026	247,528	100,303	107,766	94,651	550,248
2027	247,528	100,303	107,766	94,651	550,248

Outstanding Indebtedness

General. SMUD typically finances its capital requirements through the sale of revenue bonds, the sale of commercial paper, from draws on its Revolving Credit Facility (as defined below) and from internally generated funds. With the recent passage of the Inflation Reduction Act and the Infrastructure Investment and Jobs Act SMUD is monitoring and exploring new methods of financing, including those afforded under these two programs that provide not-for-profit public power utilities with direct federal incentive payments.

SMUD's Electric Revenue Bonds (the "Senior Bonds") are issued pursuant to Resolution No. 6649 (the "Senior Resolution") adopted in 1971, as amended and supplemented (the "Senior Resolution"). As of May 1, 2023, SMUD had Senior Bonds in the aggregate principal amount of \$1,841,715,000 outstanding. [If the plan of finance described in the forepart of this Official Statement is implemented in whole, Senior Bonds in the aggregate principal amount of \$[_____] are expected to be outstanding under the Senior Resolution.] See "PLAN OF FINANCE" in the forepart of this Official Statement. The Senior Bonds are payable solely from the Net Revenues of SMUD's Electric System. The Senior Bonds are subordinate in right of payment to the prior payment of "Maintenance and Operation Costs" and "Energy Payments" as defined in the Master Resolution, including payments by SMUD to TANC under PA3, payments by SMUD under power purchase agreements related to the Authorities and payments by SMUD to NCGA and NCEA under their respective gas supply contracts.

SMUD's Subordinated Electric Revenue Bonds (the "Subordinated Bonds") are issued pursuant to Resolution No. 85-11-1 of SMUD, adopted on November 7, 1985, as amended and supplemented (the "Subordinate Resolution"). As of May 1, 2023, SMUD had Subordinated Bonds in the aggregate principal amount of \$200,000,000 outstanding. [If the plan of finance described in the forepart of this Official Statement is implemented in whole, Subordinate Bonds in the aggregate principal amount of \$[_____] are expected to be outstanding under the Subordinate Resolution.] The Subordinated Bonds are payable solely from the Net Subordinated Revenues of SMUD's Electric System. The Subordinated Bonds are subordinate in right of payment to the prior payment of principal of and interest on the Senior Bonds.

SMUD issues commercial paper notes (the "Notes") from time to time. As of May 1, 2023, SMUD's Notes were outstanding in the aggregate principal amount of \$200,000,000. Currently, Notes in the aggregate principal amount of \$300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD's obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds. Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February and August of 2025. SMUD expects to pay \$200,000,000 of the outstanding principal amount of the Notes with proceeds of the [2023 Bonds] (as defined in the forepart of the Official Statement). See "PLAN OF FINANCE" in the forepart of the Official Statement.

SMUD also entered into a revolving credit agreement with a commercial bank and issued its taxable and tax-exempt revolving notes thereunder (collectively, the "Revolving Credit Facility") in February 2022. As of May 1, 2023, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to \$100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD's payment obligations under the Revolving Credit Facility are payable solely from available

revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds. The current term of the Revolving Credit Facility expires in February 2026.

Joint Powers Authorities. SMUD has entered into long-term take-or-pay power purchase agreements with SFA relating to the Local Gas-Fired Plants. Under such agreements, SMUD has exclusive control of the dispatch of all five of the Local Gas-Fired Plants and takes all of the power produced by the Local Gas-Fired Plants. See "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants." The Authorities are each treated as component units of SMUD for accounting purposes. Only SFA has outstanding debt, which relates solely to the Cosumnes Power Plant and is payable solely from capacity payments made by SMUD under the related power purchase agreement. As of May 1, 2023, bonds issued by SFA to finance the Cosumnes Power Plant were outstanding in the aggregate principal amount of \$89,735,000. SMUD's payments under the power purchase agreements relating to the Local Gas-Fired Plants are payable from revenues of SMUD's Electric System prior to the payment of principal of and interest on the Senior Bonds and Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and Subordinate Resolution.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Gas Authority No. 1 ("NCGA"). NCGA is treated as a component unit of SMUD for accounting purposes. NCGA issued \$757,055,000 in bonds in May 2007 for the purpose of paying Morgan Stanley Capital Group in advance for natural gas to be delivered to NCGA and then sold to SMUD pursuant to a long-term purchase contract. SMUD's obligation under the purchase contract is limited to payment for gas supplies delivered by NCGA. SMUD's payments under the purchase contract are payable from revenues of SMUD's Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCGA bonds. As of May 1, 2023, related bonds in the aggregate principal amount of \$142,935,000 remain outstanding.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Energy Authority ("NCEA"). NCEA is treated as a component unit of SMUD for accounting purposes. NCEA issued \$539,615,000 in bonds in December 2018 for the purpose of paying J. Aron & Company LLC in advance for natural gas or electricity to be delivered to NCEA and then sold to SMUD pursuant to a long-term purchase contract. SMUD's obligation under the purchase contract is limited to payment for gas or electricity supplies delivered by NCEA. SMUD's payments under the purchase contract are payable from revenues of SMUD's Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCEA bonds. As of May 1, 2023, related bonds in the aggregate principal amount of \$539,615,000 remain outstanding.

Interest Rate Swap Agreements. SMUD has two interest rate swap agreements relating to previously or currently outstanding Subordinated Bonds and two forward starting interest rate swap agreements relating to potential refunding bonds to be issued in the future, as shown in the following table. For more information, see Note 9 (Derivative Financial Instruments) to SMUD's consolidated financial statements.

<u>Effective Date</u>	<u>Termination Date</u>	<u>SMUD Pays</u>		<u>SMUD Receives</u>	<u>Notional Amount (000's)</u>	<u>Counterparty</u>
7/2/1997	7/1/2024	Floating	SIFMA	5.154%	\$38,165	J Aron & Company LLC
7/15/2003	8/15/2028	Fixed	2.894%	63% of 1M LIBOR	68,450	Morgan Stanley Capital Services, Inc.
07/12/2023	08/15/2041	Fixed	0.718%	70% of 1M LIBOR	132,020	Barclays Bank
07/12/2023	08/15/2033	Fixed	0.554%	70% of 1M LIBOR	75,680	Barclays Bank

The obligations of SMUD under the swap agreements are not secured by a pledge of revenues of SMUD’s electric system or any other property of SMUD. SMUD does not currently have any collateral posting requirements with respect to the interest rate swap agreements, but SMUD may be required to post collateral under certain circumstances. [In connection with the plan of finance described in the forepart of this Official Statement, SMUD expects to terminate the swap with Barclays Bank with a notional amount of \$75,680,000 that would otherwise become effective on July 12, 2023]. See “PLAN OF FINANCE” in the forepart of this Official Statement.

Build America Bonds Subsidy Payments. SMUD’s Electric Revenue Bonds, 2009 Series V (the “2009 Series V Bonds”) and Electric Revenue Bonds, 2010 Series W (the “2010 Series W Bonds”) were issued as “Build America Bonds” under the provisions of the American Recovery and Reinvestment Act of 2009. At the time the 2009 Series V Bonds and 2010 Series W Bonds were issued, SMUD expected to receive an annual cash subsidy payment from the United States Treasury equal to 35% of the interest payable on the 2009 Series V Bonds and the 2010 Series W Bonds. However, as a result of the federal budget process, many payments from the federal government, including Build America Bonds subsidy payments, have been reduced. Absent the federal budget reductions, the aggregate annual cash subsidy payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds would be approximately \$9.8 million. With the current federal budget reductions, SMUD has typically been receiving aggregate annual cash subsidy payments with respect to the 2009 Series V Bonds and the 2010 Series W Bonds of approximately \$9.2 million. It is possible that future federal budget actions could further reduce, or eliminate entirely, the annual cash subsidy payments with respect to Build America Bonds, including the annual cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds. SMUD cannot predict the likelihood of the further reduction or elimination of the Build America Bonds subsidy payments. A significant reduction or elimination of the cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds or the 2010 Series W Bonds could be material.

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Debt Service Requirements. The following table sets forth SMUD’s debt service requirements with respect to SMUD’s Senior Bonds and Subordinated Bonds.

DEBT SERVICE REQUIREMENTS[TO BE UPDATED]⁽¹⁾

Calendar Year	Senior Bonds Debt Service⁽²⁾	Subordinated Bonds Debt Service⁽³⁾	Total Debt Service
2022	\$ 198,841,641	\$ 10,000,000	\$ 208,841,641
2023	208,076,945	10,861,111	218,938,056
2024	176,548,637	7,483,333	184,031,970
2025	177,270,712	8,833,333	186,104,045
2026	177,369,062	5,500,000	182,869,062
2027	177,458,312	6,000,000	183,458,312
2028	177,568,563	6,000,000	183,568,563
2029	126,192,937	6,000,000	132,192,937
2030	136,265,941	6,000,000	142,265,941
2031	141,875,082	6,000,000	147,875,082
2032	141,716,845	6,000,000	147,716,845
2033	141,576,102	6,000,000	147,576,102
2034	144,261,606	6,000,000	150,261,606
2035	144,110,773	6,000,000	150,110,773
2036	143,962,001	6,000,000	149,962,001
2037	83,681,613	6,000,000	89,681,613
2038	83,528,863	6,000,000	89,528,863
2039	80,375,800	6,000,000	86,375,800
2040	80,382,550	6,000,000	86,382,550
2041	85,735,800	6,000,000	91,735,800
2042	31,422,350	28,490,000	59,912,350
2043	31,214,150	28,490,300	59,704,450
2044	31,008,750	28,490,350	59,499,100
2045	30,799,950	28,494,550	59,294,500
2046	25,391,750	28,492,150	53,883,900
2047	25,392,000	28,492,700	53,884,700
2048	25,392,500	28,490,450	53,882,950
2049	25,390,750	28,489,800	53,880,550
2050	25,394,250	-	25,394,250
Total	\$3,078,206,235	\$360,608,077	\$3,438,814,312

(1) Does not include outstanding bonds issued by the Authorities for the Local Gas-Fired Plants. Does not include bonds issued by NCGA, NCEA or SMUD’s portion of bonds issued by TANC. Payments by SMUD which are used by the Authorities, NCGA, NCEA, and TANC to pay debt service on such bonds constitute either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and the Subordinate Resolution.

(2) Includes debt service for the [] Bonds and excludes debt service for the [Refunded Bonds]. Debt service for all Senior Bonds other than the [] Bonds calculated as of December 31, 2022. Debt service for the [] Bonds calculated assuming the [] Bonds are issued on []. Debt service is not reduced by the amount of any subsidy that SMUD currently expects to receive in connection with the 2009 Series V Bonds and 2010 Series W Bonds.

(3) [As of December 31, 2021. Based on an assumed interest rate of 3% per annum following (i) the initial scheduled Mandatory Purchase Date of October 17, 2023 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series A and (ii) the initial scheduled Mandatory Purchase Date of October 15, 2025 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series B.]

Note: Amounts may not add due to rounding.

INSURANCE

SMUD maintains a comprehensive property/casualty insurance program designed to protect against catastrophic losses that would have an adverse effect on its financial position or operational capabilities. Insurance programs are continuously reviewed and modified when construction, operational exposures, or developments in the insurance industry so warrant. Long term relationships with a variety of insurers minimize SMUD's susceptibility to the effects of market cycles. SMUD budgets reserves to meet potential insurance deductibles and self-insured liability claims.

SMUD safeguards assets with all-risk property and boiler/machinery insurance with limits of \$800 million per occurrence for physical damage and business interruption combined. Various coverage sublimits and deductibles apply to losses arising from certain perils, such as business interruption, earthquake, or flood, respectively. Liability insurance is in effect to defend and indemnify SMUD against third party claims, including general, automobile and sudden and accidental pollution claims with policy limits of \$140 million, and wildfire coverage with policy limits of \$250 million, all of which include a variety of self-insured retentions.

Nuclear property and liability insurance policies are maintained in accordance with the NRC's requirements for decommissioned nuclear plants that maintain dry storage of spent fuel on-site. This includes \$100 million in first party property damage and decontamination, \$100 million for nuclear liability arising from accidents on-site, \$200 million for supplier's and transporter's nuclear liability, and \$300 million for nuclear worker liability. SMUD is exposed to possible retrospective assessments for nuclear property events occurring at other nuclear facilities in the United States capped at ten times SMUD's annual nuclear property premium (currently the maximum retrospective assessment is approximately \$1,000,000).

Other types of insurance include non-owned aircraft liability, workers' compensation, crime, cyber security, fidelity, fiduciary liability, directors' and officers' liability, professional errors and omissions, transportation, and builder's risk for major facilities under construction.

LEGAL PROCEEDINGS

SMUD is a party to numerous actions arising out of the conduct of its business and affairs, some of which are discussed below. SMUD believes that any losses or adverse financial results it may suffer in these current actions, to the extent not covered by insurance, would not, in the aggregate, have an adverse material impact on SMUD, its business and affairs, the results of its operations, financial position or liquidity.

Environmental Litigation

SMUD was one of many potentially responsible parties that had been named in a number of actions relating to environmental claims and/or complaints. SMUD has resolved these environmental claims and/or complaints and entered into settlement agreements and/or consent orders. These settlement agreements and consent orders have statutory reopener provisions which allow regulatory agencies to seek additional funds for environmental remediation under certain limited circumstances. While SMUD believes it is unlikely that any of the prior settlements or consent orders will be reopened, the possibility exists. If any of the settlements or consent orders were to be reopened, SMUD management does not believe that the outcome will have a material adverse impact on SMUD's financial position, liquidity or results of operations.

Claim for Accidental Death

In February 2020, SMUD received a claim alleging an employee of a gutter company died after he accidentally came into contact with a SMUD electrical line during an installation. The claim is for approximately \$43 million. SMUD concluded the electrical lines at the site of the accident exceeded required clearances and there is no basis for the claim against SMUD. SMUD management believes that SMUD has no potential liability in this matter and that any costs ultimately borne by SMUD will not have a material adverse impact on SMUD's financial position, liquidity or results of operations.

Proposition 26 Lawsuit

Two SMUD customers jointly filed a complaint against SMUD in October 2019, and subsequently one of the plaintiffs removed themselves from the complaint. The complaint states that SMUD violated Proposition 26 (see "DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Proposition 26" for a description of Proposition 26) when SMUD's Board on June 24, 2019 adopted rate increases for 2020 and 2021. The plaintiff contends the rate increases do not reflect SMUD's reasonable cost of service because they include a 9.2% scalar that SMUD applied to its TOD residential rate restructure in the 2017 rate process which SMUD's Board adopted at that time. Therefore, the plaintiff contends SMUD's 2020 and 2021 rates should be decreased by this scalar amount because the scalar exceeded SMUD's cost of service, and refunded to SMUD customers. Because SMUD has a strong evidentiary record supporting the Board's rate decisions in 2017 and 2019, and views the lawsuit as having little merit, SMUD anticipates the court will rule in SMUD's favor. The plaintiff has requested to amend the complaint, which has delayed the court's proceeding until the amended complaint is filed. While SMUD believes the court will rule in its favor, SMUD is unable to predict the outcome of the litigation or, if or to the extent SMUD ultimately is not successful in the litigation, what remedies against SMUD may be available. SMUD management believes that if SMUD is not successful in the litigation, and to the extent the outcome would have a material adverse impact on SMUD's financial position, liquidity, or results of operations, the Board would make appropriate rate modifications based on an evidentiary record consistent with guidance from a judicial decision in the case.

Other Litigation Matters

Currently, SMUD is party to various claims, legal actions and complaints relating to its operations, including but not limited to: property damage and personal injury, contract disputes, torts, and employment matters. SMUD management believes that the ultimate resolution of these matters will not have a material adverse effect on SMUD's financial position, liquidity or results of operation.

FERC Administrative Proceedings

SMUD is involved in a number of FERC administrative proceedings related to the operation of wholesale energy markets, regional transmission planning, gas transportation and NERC reliability standards. These proceedings generally fall into the following categories: (i) filings initiated by the CAISO (or other market participants) to adopt/modify the CAISO Tariff and/or establish market design and behavior rules; (ii) filings initiated by existing transmission owners (i.e., PG&E and the other IOUs) to pass-through costs to their existing wholesale transmission customers; (iii) filings initiated by FERC on market participants to establish market design and behavior rules or investigate market behavior by certain market participants; (iv) filings initiated by transmission owners under their transmission owner tariffs to establish a regional transmission planning process; (v) filings initiated by providers of firm gas transportation services under the Natural Gas Act; and (vi) filings initiated by NERC to develop reliability standards applicable to owners, users, and operators of the bulk electric system. In addition, SMUD is an active participant in other FERC administrative proceedings, including those related to reliability, variable

resource integration and the changing resource mix, and transmission planning and cost allocation. SMUD management believes that determinations of these FERC proceedings will not have a material adverse effect on SMUD's financial position, liquidity or results of operations.

CPUC Administrative Proceedings

Periodically, PG&E seeks to update its gas transmission and storage ("GT&S") revenue requirements and rate designs. These applications are litigated at the CPUC and affect SMUD through several tariff rates SMUD pays to move natural gas along PG&E's backbone transmission lines. In the 2019 GT&S rate case (the "2019 GT&S Case"), the CPUC affirmed the application in GT&S rates of cost causation principles to prevent excessive and unreasonable costs being shifted to electric generator backbone customers like SMUD, either through proposed changes in PG&E's natural gas storage strategy or through cost shifts within the electric generator customer class.

PG&E filed its 2023 General Rate Case ("GRC") in June 2021 which includes its gas transmission and storage revenue requirements. In September 2021, PG&E filed an application for approval of its Gas Cost Allocation and Rate Design Proposals ("CARD"). SMUD is actively participating in PG&E's GRC and CARD proceedings to ensure that costs are fairly allocated to non-core customers, including electric generator backbone customers. Separately, SMUD continues to participate and monitor a proceeding at the CPUC concerning long-term gas system planning. At this point in these proceedings, SMUD management does not anticipate that the ultimate resolution of such cases will have a material adverse effect on SMUD's financial position, liquidity, or results of operation.

DEVELOPMENTS IN THE ENERGY SECTOR

Electric Market Deregulation

In 1996, the State partially deregulated its electric energy market and the CAISO was established in 1998. Since the CAISO's formation, the State has experienced episodes of higher and more volatile prices for natural gas and wholesale electricity. In reaction to such conditions, SMUD made significant changes to its business strategy to mitigate the impacts of the more volatile and unpredictable energy markets. Volatility in energy prices in the State are always a potential risk due to a variety of factors which affect both the supply and demand for electricity in the western United States. These factors include, but are not limited to, the implementation of the CAISO market design changes, insufficient generation resources, the increase in intermittent renewable energy resources, natural gas price volatility, fuel costs and availability, weather and natural disasters, transmission constraints and levels of hydroelectric generation within the region. While SMUD has taken a number of steps to mitigate its exposure to price volatility associated with these factors, this price volatility under extreme conditions may contribute to greater volatility in SMUD's net revenues from the purchase and sale of electric energy and, therefore, could materially adversely affect the financial condition and liquidity of SMUD. For a discussion of SMUD's current resource planning activities and risk management strategies, see "BUSINESS STRATEGY" above.

Cybersecurity

Cybersecurity continues to be a top priority for SMUD. Attacks or threats directed at critical electric or energy sector operations could damage or cause the shut-down of generation, transmission or distribution assets that are essential to SMUD's ability to serve its customers, cause operational malfunctions and outages affecting SMUD's electric system, and result in costly recovery and remediation efforts. The costs of security measures or of remedying breaches could be material.

SMUD participates in sharing and receiving information about cyber security threats in real-time through the Electricity Information Sharing and Analysis Center (“E-ISAC”), the central hub for such data to actively manage risk related to potential cyber intrusion. SMUD also participates in NERC’s development of mandatory, enforceable cyber security standards to address vulnerabilities in electric utility systems. SMUD also adopts voluntary measures suggested as best practices by the National Institute of Standards and Technology (“NIST”) in its national framework.

SMUD’s prudent response to this ever-changing threat requires constant monitoring and frequent updates to implement new regulatory requirements as they are developed. SMUD manages risk related to frequently changing regulatory requirements by participating in the development of standards at NERC and NIST and through active engagement in the cyber security policy dialogue in Congress.

Physical Security

Physical security is a critical concern for electric utilities as they seek to protect their infrastructure from a range of threats. The electric utility infrastructure is complex and consists of multiple components, such as power plants, substations, transmission and distribution lines, and other facilities. SMUD employs a dedicated physical security team that is deployed 24/7 and allows SMUD to respond to emergent events in a safe, coordinated, efficient, and cohesive manner, protecting the lives of its employees, customers, community, properties and assets. SMUD has policies, processes and procedures in place that outline the access controls and restrictions for its properties. SMUD restricts access based on need as it determines, while adhering to applicable laws, regulations and standards such as NERC Reliability Standards and NRC regulations. SMUD also maintains a Utility Security Plan adopted by the Board representing SMUD’s compliance with the CPUC’s Safety and Enforcement Divisions six-step security plan process described in CPUC Decision 19-01-018.

During times of elevated, imminent threats, safety and/or security concerns, SMUD’s Security Operations team, under the direction of the Chief Financial Officer or delegate, reserves the right to deploy additional security measures, controls, and further restrict or limit access to its properties to increase its security posture.

SMUD operates a 24/7 security operations center which monitors and coordinates responses to situations reported by internal and external stakeholders, or which are detected by SMUD’s security technology. The technology includes access control, video surveillance, and various types of intrusion detection solutions. The security operations center is a central hub for initial contact for physical security calls from employees of suspicious events and initiates incident responses as needed.

Federal Legislation and Regulatory Proceedings

Energy Policy Act of 2005. On August 8, 2005, the Energy Policy Act of 2005 (the “EPAAct of 2005”) was signed into law. The law includes a number of energy-related provisions, including among other things limited FERC jurisdiction over interstate transmission assets of municipal utilities, cooperatives and federal utilities to order these entities to provide transmission services on rates and terms comparable to those the entities charge and provide to themselves; the grant of authority to FERC to establish and certify an electric reliability organization to develop and enforce reliability standards for users of the bulk power transmission system; and prohibitions of certain market practices including the provision of false information and related expansion of FERC civil and criminal penalty authority. So far, the most visible impact of the EPAAct of 2005 on SMUD has been the development of mandatory federal reliability standards.

Federal Regulation of Transmission Access. The Energy Policy Act of 1992 (the “Energy Policy Act”) made fundamental changes in the federal regulation of the electric utility industry, particularly in the area of transmission access. The Energy Policy Act provided FERC with the authority to require a transmitting utility to provide transmission services at rates, charges, terms and conditions set by FERC. The purpose of these changes, in part, was to bring about increased competition in the electric utility industry. Under the Energy Policy Act, electric utilities owned by municipalities and other public agencies which own or operate electric power transmission facilities which are used for the sale of electric energy at wholesale are “transmitting utilities” subject to the requirements of the Energy Policy Act.

Since the Energy Policy Act, FERC has adopted a series of rules to implement competitive open access to transmission facilities and regional transmission planning. Order No. 888, issued in 1996, requires the provision of open access transmission services on a nondiscriminatory basis by all “jurisdictional utilities” (which, by definition, does not include municipal entities like SMUD) by requiring all such utilities to file OATTs. Order No. 888 also requires “nonjurisdictional utilities” (which, by definition, does include SMUD) that purchase transmission services from a jurisdictional utility under an open access tariff and that owns or controls transmission facilities to provide open access service to the jurisdictional utility under terms that are comparable to the service that the nonjurisdictional utility provides itself. Section 211A of the EAct of 2005 authorizes, but does not require, FERC to order unregulated transmission utilities to provide transmission services, including rates and terms and conditions, that are comparable to those under which the unregulated transmitting utility provides transmission services to itself that are not unduly discriminatory or preferential.

In Order 890, issued in 2007, FERC stated that it will implement its authority under Section 211A on a case-by-case basis and retain the current reciprocity provisions.

In 2011, FERC issued Order 1000, which among other things requires public utility (jurisdictional) transmission providers to participate in a regional transmission planning process that produces a regional transmission plan and that incorporates a regional and inter-regional cost allocation methodology. Similar to Order 890, FERC states that it will implement its authority under Section 211A on a case-by-case basis. However, in Order 1000, FERC appears to expand upon the current reciprocity provisions and states that it has the authority to allocate costs to beneficiaries of services provided by specific transmission facilities even in the absence of a contractual relationship between the owner of the transmission facilities and the identified beneficiary.

SMUD, individually, and through the Large Public Power Council (“LPPC”), appealed Order 1000, but in 2014 the D.C. Circuit Court of Appeals rejected all of the arguments raised on appeal, upholding the entirety of Order 1000.

The jurisdictional members of WestConnect filed their proposed regional planning process and cost allocation methodology through a series of compliance filings at FERC. FERC accepted binding cost allocation for jurisdictional transmission providers of WestConnect and mandated that non-jurisdictional transmission providers (such as SMUD) identified as beneficiaries of a project have the ability to not accept the cost allocation. WestConnect’s Order 1000 planning process began with the 2016-2017 planning cycle.

However, in response to FERC’s WestConnect orders on compliance, El Paso Electric Company (“El Paso”), a jurisdictional transmission provider, petitioned to the Court of Appeals for the 5th Circuit. El Paso contends that FERC’s WestConnect orders violate Order 1000’s cost causation principle because WestConnect’s binding cost allocation applies only to the jurisdictional transmission providers and thus forces jurisdictional transmission providers to subsidize projects benefitting non-jurisdictional transmission providers that opt-out of projects. The non-jurisdictional transmission providers agreed on a settlement with the jurisdictional transmission providers to resolve the matters on appeal in the 5th Circuit, but FERC

ultimately did not accept the settlement. The court scheduled briefings and oral argument for the case, which took place April 3, 2023. A court decision is expected sometime later in 2023. In the meantime, SMUD continues to participate in the WestConnect process.

SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD's electric system or the electric industry generally. However, WestConnect has conducted planning cycles under its Order 1000 planning process and has not identified any project eligible for cost allocation. SMUD will continue to take any action necessary, including withdrawing from a cost allocation determination and engaging in FERC proceedings, to ensure that it is not required to pay for transmission costs in the absence of an agreement or service relationship.

Of note, on April 21, 2022, FERC issued a Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection (the "NOPR"). The NOPR seeks input on proposals that would impact the Order 1000 planning and cost allocation process. SMUD has been engaged in the proceeding, providing input and helping draft comments with trade organizations, including LPPC. FERC has not issued any subsequent order. SMUD will continue to monitor and be engaged in any developments at FERC that impact the Order 1000 process and its participation in WestConnect.

NERC Reliability Standards. The EAct of 2005 required FERC to certify an electric reliability organization ("ERO") to develop mandatory and enforceable reliability standards, subject to FERC review and approval. On February 3, 2006, FERC issued Order 672, which certified NERC as the ERO. Many reliability standards have since been approved by FERC, including those aimed at protecting the bulk electric system from physical and cyber threats.

The ERO or the regional entities, such as WECC, may enforce the reliability standards, subject to FERC oversight or FERC may independently enforce reliability standards. Potential monetary sanctions include fines of up to \$1,496,035 per violation per day. Order 693 provides ERO and regional entities with the discretion necessary to assess penalties for such violations, while also having discretion to calculate a penalty without collecting the penalty if circumstances warrant.

Anti-Market Manipulation Rules. EAct of 2005 gave FERC the authority to issue rules to prevent market manipulation in jurisdictional wholesale power and gas markets, and in jurisdictional transmission and transportation services. These anti-market manipulation rules apply to non-jurisdictional entities such as SMUD. Further, EAct of 2005 provided FERC civil penalty authority, which the Commission has stated that it will exercise carefully by assuring that its market manipulation rules are clear.

Greenhouse Gas Emissions. The United States Environmental Protection Agency (the "EPA") has taken steps to regulate GHG emissions under existing law. In 2007, the U.S. Supreme Court held that the Clean Air Act ("CAA") directed EPA to regulate GHG emissions from new motor vehicles if it judged that such emissions contribute to climate change. In 2009, EPA finalized an "Endangerment Finding" under the CAA, declaring that six identified GHGs – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride – cause global warming, and that global warming endangers public health and welfare. Subsequently, EPA promulgated GHG standards for passenger cars and light-duty trucks (the so-called "Tailpipe Rule"). Although that rulemaking was later withdrawn by a different administration, prompting litigation and re-proposal of the standards that has only recently been finalized, the original promulgation of the Tailpipe Rule required EPA to also address emissions of the same pollutants from other sources, namely, the electric sector.

In 2014, EPA issued a proposed rule under section 111(d) of the CAA called the Clean Power Plan (the "CPP") that projected power sector emissions reductions of 30% below 2005 levels by 2030. The

proposed CPP would have established a rate-based emissions goal for each state, providing states the responsibility to develop a State Implementation Plan (“SIP”) describing how each will meet the goal assigned by EPA using the “Best System of Emissions Reduction” (“BSER”) established by EPA. The BSER under the CPP featured a suite of emissions reduction measures including fuel switching, emissions trading, and other measures. Significantly for the State and its regulated entities, the proposed CPP included a “state measures” plan that allowed for continued operation of successful state programs that achieve CPP goals. The rule was finalized in October 2015.

In November 2015, 27 states and numerous corporations challenged the CPP in court, alleging that EPA had exceeded its authority under the CAA. The U.S. Supreme Court stayed implementation of the CPP pending disposition of the petitions for review in the D.C. Circuit and any subsequent review by the Supreme Court. The D.C. Circuit Court of Appeals held oral arguments on the petitioner’s claims, but before the court issued a decision, the 2016 presidential election resulted in a change of administration.

The new administration quickly moved for an abeyance (or stay) of the case for as long as the agency needed to review and withdraw the CPP. The court issued a series of 60-day abeyances and ultimately dismissed the case on September 17, 2019. Meanwhile, in August 2018, EPA proceeded to withdraw the CPP and proposed a different rule under the same provision of the CAA. The new rule, known as the Affordable Clean Energy (“ACE”) rule, would establish a BSER that only includes measures that can be undertaken at an individual power plant, rather than the broader suite of measures envisioned under the CPP. The ACE rule would also allow states to decide individually, on a case-by-case basis, the standards to be achieved by the best system of emission reductions, as well as exempt certain upgrades of fossil-fuel power plants from the CAA’s New Source Review program and extend the time to implement SIPs after the ACE rule is finalized. The ACE rule was challenged in court by environmental groups and states alleging that the revised rule inadequately responds to EPA’s responsibility to protect public health and welfare. SMUD joined in this litigation along with other challengers. The D.C. Circuit vacated the ACE rule on January 19, 2021, and remanded it to the EPA for review and revision, just days before a new presidential administration took office. Several states led by West Virginia and coal industry members appealed the decision.

In June 2022, the U.S. Supreme Court issued its opinion in *West Virginia v. EPA*, striking down the CPP and foreclosing any future regulations of “significant political and economic significance” if Congress has not expressly authorized them. While the decision does not restrict EPA to only requiring measures “inside the fence line” at an individual power plant to control GHGs, it appears unlikely that the EPA will be able to require material reductions in GHGs to mitigate climate change through section 111(d) of the CAA.

Federal Clean Energy Legislation. SMUD actively participates in discussion at the federal level regarding legislation that would meaningfully impact SMUD’s existing GHG reduction strategies or impose new requirements for electric generators, including a proposed federal clean energy standard. In the 117th Congress, a clean electricity performance program was considered but ultimately lacked support to pass. Instead, Congress extended and expanded clean energy tax credits and created new grant and rebate programs to incentivize clean energy investments in the Inflation Reduction Act of 2022. While it is possible that a future Congress may revisit the concept of a clean energy standard or other GHG reduction regime, it is possible that the passage of the Inflation Reduction Act will diminish the likelihood of a new regulatory framework being enacted in the near future.

SMUD is unable to predict whether any new EPA rulemakings will be undertaken, and what the full impact of the reduction of fossil-based generation over time will have on the operations and finances of SMUD’s electric system or the electric utility industry generally.

State Legislation and Regulatory Proceedings

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills provide for reduced GHG emission standards and greater investment in energy efficient and environmentally friendly generation alternatives through more stringent RPS. Additionally, ongoing regulatory proceedings address water flow and quality issues related to the Sacramento – San Joaquin River Delta. The following is a brief summary of these bills and regulatory proceedings.

Greenhouse Gas Emissions. On September 27, 2006, the Governor of the State signed into law AB 32, the Global Warming Solutions Act of 2006 (“AB 32”). AB 32 requires the California Air Resources Board (“CARB”) to adopt enforceable GHG emission limits and emission reduction measures in order to reduce GHG emissions to 1990 levels by 2020. In addition, AB 32 establishes a mandatory reporting program for all IOUs, local, publicly-owned electric utilities and other load-serving entities (electric utilities providing energy to end-use customers) (“LSEs”). The AB 32 reporting program allows CARB to adopt regulations using market-based compliance mechanisms such as a “cap-and-trade” system.

On December 16, 2010, CARB approved a resolution adopting cap-and-trade regulations for the State. The regulations became effective on January 1, 2012. As adopted, the cap-and-trade program covers sources accounting for 85% of the State’s GHG emissions, the largest program of its type in the United States.

The cap-and-trade program has been implemented in phases. The first phase of the program (through December 31, 2014) introduced a hard emissions cap on the combined electric utility and large industrial sectors, covering all sources emitting more than 25,000 metric tons of carbon dioxide-equivalent greenhouse gases (“CO₂e”) per year. In 2015, the program was expanded to cover distributors of transportation, natural gas, and other fossil fuels. The cap declined about 2 percent in 2014, and declined 3 percent annually from 2015 to 2020. The cap-and-trade program requires covered entities to retire compliance instruments (allowances and carbon offsets) for each metric ton of CO₂e they emit. Initially, CARB allocated free allowances to LSEs and most industrial facilities at roughly 90% of their average emissions. SMUD was granted a higher amount because of early action taken to reduce GHG emissions. In the case of electric utilities, the value of allowances must be used to benefit ratepayers and achieve GHG emission reductions. As the program matures, some covered entities will be required to buy an increasing portion of their allowances at auction or on the secondary market. The cap-and-trade program also allows covered entities to use offset credits for compliance purposes (not exceeding 8% of a regulated entity’s compliance obligation through 2020, 4% from 2021 through 2025, and 6% from 2026 through 2030). Offsets must be obtained from certified projects in sectors that are not regulated under the cap-and-trade program and are subject to other restrictions.

In November of 2012, CARB conducted its first allowance auction and auctions now occur on a quarterly schedule. On January 1, 2014, CARB linked the State cap and trade program with a companion program in the Canadian province of Quebec. The first quarterly joint auction for the linked programs occurred in November, 2014. On January 1, 2018, CARB linked the State’s cap-and-trade program with a companion program in the Canadian province of Ontario. Immediately thereafter, an entity in any one of the three jurisdictions was able to purchase allowances on the secondary market in a linked jurisdiction, and as of February 21, 2018 (the date of the first joint auction) could purchase allowances in the joint auction. In June 2018, elections in Ontario changed political parties and the new administration formally withdrew from the Cap-and-Trade linkage. CARB has limited purchase and use of Ontario allowances in response. The August 2018 Cap and Trade auction did not include Ontario. In 2021, the Washington state legislature passed a Cap-and-Trade bill, which [is expected to] interact with the State’s markets. Future potential near-term links to the CARB cap-and-trade program also include the states of Oregon, which has

adopted a cap and trade program, and New Mexico, which is considering the adoption of a cap and trade program.

On October 7, 2015, the Governor of the State signed SB 350 that contained aggressive goals for reducing carbon emissions by 2030, including raising the proportion of renewable energy to 50%, reducing the use of petroleum fuel in cars and trucks by up to 50%, and doubling the energy efficiency of existing buildings. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*” for additional information. In addition, SB 350 established requirements for larger POU’s to adopt (by January 1, 2019) and file with the CEC Integrated Resource Plans (“IRPs”) by April 2019 that would show planned procurement to achieve the 50% RPS and State GHG goals established by CARB. The CEC developed “guidelines” for these IRPs for POU’s in 2017, updated them in 2018, and proposed additional updates in 2022. CARB established specific GHG target ranges for these IRPs in summer 2018, with SMUD’s planning target set at 1.1 – 1.9 million metric tons of emissions. SMUD developed and adopted an IRP in 2018 through a comprehensive public process and filed the adopted IRP with the CEC in April 2019. SMUD adopted an updated IRP in June 2022 and filed the updated IRP with the CEC in September 2022. SMUD’s updated IRP plans for a greater than 92% reduction in GHG emissions by 2030 relative to 1990 levels, which equals approximately 250,000 metric tons of GHG emissions in 2030. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*.”

On April 29, 2015, the Governor of the State signed Executive Order B-30-15, establishing a goal for the State to reduce GHG emissions to 40% below 1990 levels by 2030. In 2016, the State Legislature passed Senate Bill 32 (“SB 32”), which codified Governor Brown’s goal of reducing the State’s GHG emissions to 40% below 1990 levels by 2030. In 2017, the State Legislature passed Assembly Bill 398 (“AB 398”), explicitly authorizing the continuation of the cap and trade program, with designated changes, through 2030. Subsequently, CARB adopted an initial set of regulatory changes extending the Cap-and-Trade program, including establishing utility sector allowance allocations through 2030. In 2018, CARB completed a rulemaking to implement the cap-and-trade program changes designated by AB 398. These changes include development of a hard price ceiling for the cap-and-trade program and two price-containment points below that ceiling, in an attempt to ensure stable prices in the program. CARB adopted final regulations on December 13, 2018.

In December 2022, CARB approved the agency’s 2022 Scoping Plan, a roadmap to reducing GHG emissions by 85% and achieving economy-wide carbon neutrality by 2045. The Plan does not impose new mandates, but calls for state policymakers and regulatory agencies to implement programs and policies that support the Plan’s goals. In 2023, CARB signaled that they would reopen regulations that govern several programs that SMUD participates in, including Cap and Trade, to align them with the goals set forth in the Scoping Plan. SMUD will monitor and, as appropriate, participate in these forthcoming regulatory proceedings.

In addition, any new projects constructed in the State, including power plants, that may cause a significant adverse impact on the environment must be analyzed under CEQA. Some State agencies have begun using CEQA in novel ways to require mitigation of “significant” GHG emissions caused, either directly or indirectly, by a project. Pursuant to Senate Bill 97 passed in 2007, CARB will assist the Governor’s Office of Planning and Research in setting thresholds of significance under CEQA of GHG impacts from new projects. This is an area of State law that is evolving and untested in the courts. However, there is a risk that any project proponent of an electric system infrastructure project might have to mitigate such potential impacts to a level of less than significance.

On December 3, 2012, the Superior Court issued a ruling in *Cleveland National Forest Foundation v. San Diego Association of Governments* (“SANDAG”), Case No. 2100-00101593, that sided with the

State Attorney General and the other petitioners stating that SANDAG did not follow CEQA when it adopted a \$257 billion regional transportation plan in 2011. The ruling expressly invalidated the certification of the Environmental Impact Report (“EIR”) on the grounds that the EIR should have analyzed the plan’s consistency with the governor’s policy goal to reduce GHG emissions by 80% by 2050 as articulated in the 2005 Executive Order S-03-05. On November 24, 2014, the Fourth Appellate District upheld the trial court in a published decision, and SANDAG appealed to the State Supreme Court. On July 13, 2017, the Supreme Court reversed and held that SANDAG’s decision not to adopt the 2050 goal was not an abuse of discretion. Nevertheless, the Court articulated three clear principles for agencies to follow in their CEQA review of planning documents: 1) agencies must take seriously the significance of even small increases in GHG emissions; 2) they must consider science-based State policy guidance in their decision-making; and 3) they are required to use the best scientific information available to determine whether their planning decisions are consistent with the State’s goals. These principles will apply to SMUD in CEQA reviews of future projects.

On September 29, 2006, the Governor of the State signed into law Senate Bill 1368 (“SB 1368”), the GHG Emissions Performance Standard (“EPS”). SB 1368 limits long-term investments in baseload generation by the State’s utilities to power plants that meet an EPS jointly established by the CEC and the CPUC. The agencies have set the EPS at 1,100 pounds CO₂ per MWh, which is roughly half of the CO₂ emissions rate of a conventional coal-fired power plant. CEC regulations to implement the law for POU’s were approved by the Office of Administrative Law on October 16, 2007.

SMUD’s primary supply and demand-side resource needs to meet customers’ electricity usage patterns over the next 10 years are for peaking resources. Currently there is a ban in the State that prohibits the development of nuclear power plants until there is a permanent storage solution for spent fuel rods. With the effective ban on new coal power imports under SB 1368, natural gas-fired, combined cycle power plants would appear to be the primary viable option for fossil fuel-based baseload power plant development absent the implementation of new technologies in connection with other resource options. The reliance on a single fuel source will continue to put pressure on the natural gas market in the United States. SMUD has in place a natural gas procurement plan to mitigate natural gas volatility, see “POWER SUPPLY AND TRANSMISSION – Fuel Supply” above.

On September 16, 2022, the Governor of the State signed into law SB 1158, which requires every retail supplier of electricity to annually report hourly greenhouse gas emissions. The California Energy Commission will establish a process by July 1, 2024, and the implementation date is 2028.

Also on September 16, 2022, the Governor of the State signed into law SB 1020, which creates interim climate targets under which eligible renewable energy resources and zero-carbon resources must supply 90% of all retail sales of electricity to California end-use customers by December 31, 2035, and 95% by December 31, 2040. The bill also requires each State agency to ensure that zero carbon resources and eligible renewable energy resources supply 100 percent of electricity procured on its behalf by December 31, 2035. SMUD provides electricity to a number of State agency buildings and will work with State agencies to comply with this requirement.

Reliability. On June 30, 2022, the Governor signed the 2022-23 budget, along with a number of trailer bills, which provide implementing details on the budget line items. Included in AB 205, the energy trailer bill, are a number of reliability programs.

1. CEC Distributed Electricity Backup Assets Program to incentivize the construction of cleaner and more efficient distributed energy assets that would serve as on-call emergency supply or load reduction for the state’s electrical grid during extreme events.

2. CEC Demand Side Grid Support Program to pay customers to reduce demand during stressed grid events this summer. SMUD is actively engaging the CEC on the development of this program.
3. DWR Strategic Reliability Reserve to secure resources for summer reliability or to preserve the option to extend the life of facilities that otherwise would retire, new temporary generators of more than 5 megawatts (MWs), new energy storage systems of at least 20 MWs, generation facilities that use lean, zero-emission fuel technologies, or new zero-emission technologies that can be operational by December 31, 2026.

Energy Efficiency. Senate Bill 1037 (“SB 1037”), signed by Governor Schwarzenegger on September 29, 2005, requires that each municipal electric utility, including SMUD, prior to procuring new energy generation resources, first acquire all available energy efficiency, demand reduction and renewable resources that are cost effective, reliable and feasible. SB 1037 also requires each municipal electric utility to report annually to its customers and to the CEC its investment in energy efficiency and demand reduction programs. Further, State Assembly Bill 2021 (“AB 2021”), signed by the Governor on September 29, 2006 requires that the publicly owned utilities establish energy efficiency and demand reduction targets and report and explain the basis of the targets beginning June 1, 2007 and every three years thereafter for a ten year horizon. Future reporting requirements as set forth in AB 2021 include: (i) the identification of sources of funding for the investment in energy efficiency and demand reduction programs, (ii) the methodologies and input assumptions used to determine cost effectiveness, and (iii) the results of an independent evaluation to measure and verify energy efficiency savings and demand reduction program impacts. The information obtained from local publicly owned utilities will be used by the CEC to present the progress made by the publicly owned utilities on the State’s goal of reducing electrical consumption by 10% in ten years and amelioration with the GHG targets presented in Executive Order S-3-05 enacted by the Governor of the State on June 1, 2005.

In response to SB 1037 and AB 2021, SMUD established a specific goal of reducing energy consumption by 15% by 2018 and adopted annual targets for gigawatt hour and megawatt savings. SMUD revisits its energy efficiency goals and programs on a regular basis to ensure compliance with State policies established by SB 1037 and AB 2021 (as modified by SB 350).

SB 350 (passed in 2015) requires the CEC to develop statewide energy efficiency targets for 2030 aimed at doubling the achieved savings, and requires POU’s to establish efficiency targets that are “consistent” with those targets. In 2017, the CEC developed a report on the doubling of energy efficiency targets required by SB 350. Both SB 350 and the CEC report contemplate the use of fuel substitution to meet energy efficiency targets and have a strong focus on carbon reduction. In response, SMUD developed a methodology and carbon tool to count fuel substitution, namely switching natural gas end-uses to efficient electric end uses and measuring savings in carbon emissions. SMUD presented its methodology to the joint state agency working group known as the Fuel Substitution Working Group several times in 2019 and adopted a carbon-based metric in early 2020 to guide overall SMUD carbon targets. This goal is expected to facilitate substantial expansion of building electrification and result in more than double the overall amount of energy efficiency being delivered per year, when measured on a carbon reduction basis. The vast majority of this energy efficiency (more than 85%) is expected to be delivered through efficient electrification by 2030.

Also passed in 2015 was AB 802. This bill directed the CEC to develop a State-wide building energy use benchmarking and public disclosure program for those buildings greater than 50,000 square feet. As set forth in regulations adopted by the CEC, building owners are required to report building characteristic information and energy use data each year. The reporting began in 2018 for buildings without residential utility accounts and in 2019 for buildings with 17 or more residential utility accounts. Energy utilities must provide building-level energy use data to building owners upon request.

In order to support the implementation of SB 350 and AB 802, the CEC opened a rulemaking to amend its Title 20 Data Collection regulations, resulting in an expansion of customer data utilities must report to the CEC. The CEC adopted regulations pursuant to the rulemaking in February 2018, and the regulations were approved and went into effect in the Summer of 2018. SMUD has made several data filings under the new regulations. In 2020, the CEC opened a second phase of Data Collection rulemaking to amend regulations necessary to develop the policy reports and analysis as required by statute to assist in the CEC's energy forecasting and assessment activities. The OAL approved the codifying of the regulations from that proceeding on December 30, 2021.

Electric Transportation Mandates Executive Order B-48-18, enacted January 2018, ordered all state entities to work with the private sector and all appropriate levels of government to put at least 5 million zero-emission vehicles on California roads by 2030, as well as 250,000 zero-emission vehicle chargers by 2025.

In September 2020, Governor Newsom signed Executive Order N-79-20 to accelerate actions to mitigate and adapt to climate change, and to more quickly move toward a low-carbon, sustainable and resilient future. Executive Order N-79-20 states the goal of 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035 and 100 percent of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks.

CARB has proposed or adopted a suite of regulations to support these State policies, including the Zero Emission Forklift Regulation, Advanced Clean Trucks Rule (the "ACT Rule"), Advanced Clean Cars II ("ACC II"), and the Advanced Clean Fleets Rule (the "ACF Rule"). The ACT Rule and ACC II establish increasing zero-emission vehicle ("ZEV") sales requirements for truck and light-duty vehicle manufacturers, respectively. The ACT Rule, which took effect in March 2021, requires that by 2035, at least 55% of Class 2b-3 truck sales are ZEVs, at least 75% of Class 4-8 straight truck sales, and 40% of truck tractor sales. ACC II, which took effect in November 2022, requires that 100% of light-duty passenger car, truck, and SUV sales in California be ZEV by the 2035 model year.

CARB is expected to adopt the ACF Rule in 2023. The proposed ACF Rule would establish ZEV purchase and fleet composition requirements for on-road medium- and heavy-duty ("MHD") fleets in California. Under the proposed ACF Rule, public fleets like SMUD would have two compliance options. The first is a ZEV purchase requirement: 50% of annual MHD vehicle purchases would need to be ZEVs starting in 2024, and 100% starting in 2027. The second is the optional ZEV milestone option, under which the composition of the MHD fleet meets certain ZEV percentages over time, which would provide SMUD with considerably greater compliance flexibility. The proposed ACF Rule would also accelerate the manufacturer ZEV sales requirement to 100% of all MHD truck sales by the 2036 model year.

Additionally, CARB is developing a regulation to drive greater deployment of zero-emission forklifts within fleets throughout the State. This Zero-Emission Forklift Regulation is scheduled for CARB consideration in 2023.

Increases in ZEV adoption and deployment will result in increased customer usage of electricity. The ACF Rule would also require SMUD, as a fleet owner, to transition SMUD's MHD fleet to ZEVs.

Rooftop Solar Mandate. In February, 2018, the CEC approved updates to the 2019 Building Energy Efficiency Standards to require installation of rooftop photovoltaic solar systems for residential buildings under three stories constructed starting in 2020, with an option to satisfy the requirement through community shared solar electric generation or battery storage systems. This "Community Solar" compliance mechanism permits a program administrator, such as a utility, to provide solar power to participating residential customers instead of rooftop solar. SMUD submitted an application to the CEC to

be a program administrator of SMUD's Community Solar program, Neighborhood SolarShares, in 2019, and the CEC approved SMUD's application in February 2020. In 2021, the CEC revised the Community Solar provisions in the 2022 Building Energy Efficiency Standards to include an "opt-out" provision, which will impact the design and implementation of SMUD's Neighborhood SolarShares program. SMUD updated its Neighborhood SolarShares program materials to incorporate the 2022 revisions, which took effect in January 2023, and has received approval from the CEC to continue serving as a program administrator. See also "BUSINESS STRATEGY – Serving SMUD's Customers – *Renewable Options.*"

Renewables Portfolio Standard. Senate Bill 100 was passed by the Legislature and approved by Governor Brown on September 10, 2018. The bill sets a 50% RPS target for 2026 and sets compliance period targets at 44% by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. The bill also creates a statewide planning goal to meet all of the state's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045.

Load Management Standards. Sections 25213, 25218(e) and 25403.5 of the Public Resources Code mandate and authorize the CEC to adopt rules and regulations to reduce the uneconomic and unnecessary consumption of energy and to manage energy loads, or demand, to help maintain electrical grid reliability. The original Load Management Standards ("LMS") regulations were adopted in 1979 and required the implementation of marginal cost pricing industrial time-of-use rates, and residential load control programs. In October 2022, the CEC adopted an update to the LMS regulations to require the largest electric service providers in California (including SMUD) to develop retail electricity rates that change at least hourly to reflect locational marginal costs and submit those rates to the utility's governing body for approval. The LMS proposes the following: a) voluntary hourly or sub-hourly rates for each customer class or b) a cost-effective program, to be implemented by the utilities by January 2026. The effective date of the LMS regulation is April 1, 2023. The LMS regulations are intended to increase efficiency and demand flexibility in California's electricity grid. SMUD's Pricing team is leading SMUD's LMS implementation work, including the development of a Compliance Plan to be submitted to SMUD's Board by the fourth quarter of 2023 and then to the CEC.

Energy Storage Systems. In September 2010, the State Legislature enacted, and the Governor signed into law, Assembly Bill 2514 ("AB 2514"). On or before March 1, 2012, the governing board of each POU was required to initiate a process to determine appropriate targets, if any, for the utility to procure viable and cost-effective energy storage systems to be achieved by December 31, 2016, and December 31, 2020. The bill required each POU to report certain information to the CEC. In 2014, SMUD set a 0 MW target for 2017, and in 2017 set a 9 MW target for 2020. In 2018, SMUD identified a potential need for 246 MW of storage by 2030. Following SMUD's 2020 compliance report to the CEC in January 2021, going forward SMUD will evaluate and report energy storage planning as part of its IRP update at least once every five years. See also "BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Energy Storage Systems.*"

Sacramento-San Joaquin River Bay-Delta Processes. The Sacramento-San Joaquin River Delta is an expansive inland estuary, formed at the western edge of the California Central Valley by the confluence of the Sacramento and San Joaquin rivers ("Delta"). There are two substantial Delta planning processes with the potential to affect (1) energy available for SMUD's purchase from the Central Valley Project ("CVP") and (2) flows within the Upper American River watershed. These processes are called the Bay-Delta Water Quality Control Plan ("Bay-Delta Plan") and the Delta Conveyance Project.

The Bay-Delta Water Quality Control Plan is updated periodically by the State Water Resources Control Board ("SWRCB"), the last time being in 2006. The current Bay-Delta Plan update process is being implemented in four phases. The first phase considered southern Delta water quality, with a significant focus on San Joaquin River tributaries. Phase 2, which is initially being addressed by a

document under development by SWRCB staff, will address Sacramento River tributaries and various flow related issues, including the critically important one of those tributaries' contribution to Delta outflow. Phase 3 will concern changes to water rights needed to implement Phase 2. A substantial change in Delta outflow requirements could have a major impact on the timing of hydroelectric energy generation by the CVP. SMUD has a long-term agreement with WAPA to purchase some of this power (see "POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – *Western Area Power Administration*"). On July 18, 2018, the SWRCB released an updated Framework document signaling its staff's intent to propose Delta outflow requirements of 45–65% unimpaired flows for the Sacramento River tributaries (which includes the American River, the upper portions of which are where the UARP sits), though the report will analyze requirements of 35–75%. If these criteria were implemented, they could cut CVP generation by 50 to 63%. Governor Newsom has urged the SWRCB, other agencies and affected parties to execute voluntary agreements to address species' needs and outflow requirements. Although the negotiations have been slow, it is expected they will eventually result in a reasonable compromise. If the agreements do not come to fruition, SMUD plans to fully participate in all regulatory and legal proceedings to argue for consideration and minimization of impacts to hydropower generation. SMUD will assess the potential impacts of proposed modifications to the present outflow objectives on SMUD's operations once the SWRCB makes those available.

In July 2022, the State Department of Water Resources ("DWR") released a Draft Environmental Impact Report ("EIR") to evaluate the potential impacts of carrying out the Delta Conveyance Project; the U.S. Army Corps of Engineers released a separate Environmental Impact Statement to evaluate the effects of the Project pursuant to the National Environmental Policy Act. The Delta Conveyance Project is expected to entail construction of two intakes on the Sacramento River that will carry water to a main tunnel to the California Aqueduct for delivery south of the Delta. The Delta Conveyance Project may pose the potential to exacerbate impacts to already imperiled aquatic species, and in turn could have indirectly prompted regulatory agencies to require third parties, such as SMUD, to compensate by making changes to their operations. The Bureau of Reclamation is not a party to the Delta Conveyance Project, which should eliminate the potential for CVP power to be used to supply Delta Conveyance Project pumps. SMUD will monitor the proceedings and participate as necessary to ensure any impacts to SMUD interests are minimized.

Proposition 26. Proposition 26 was approved by the electorate on November 2, 2010 and amends Article XIII A and Article XIII C of the State Constitution. Proposition 26 imposes a two-thirds voter approval requirement for the imposition of fees and charges by the State, unless the fees and charges are expressly excluded. It also imposes a majority voter approval requirement on local governments with respect to fees and charges for general purposes, and a two-thirds voter approval requirement with respect to fees and charges for special purposes, unless the fees and charges are expressly excluded. The initiative, according to its supporters, is intended to prevent the circumvention of tax limitations imposed by the voters pursuant to Proposition 13, approved in 1978, and other measures through the use of non-tax fees and charges. Proposition 26 expressly excludes from its scope a charge imposed for a specific local government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable cost to the local government of providing the service or product. Proposition 26 is not retroactive as applied to local governments. Although SMUD believes that the initiative was not intended to apply to fees for utility services such as those charged by SMUD and its fees and charges meet the criteria of the exclusion described above, it is possible that Proposition 26 could be interpreted to further limit fees and charges for electric utility services and/or require stricter standards for the allocation of costs among customer classes. SMUD is unable to predict at this time how Proposition 26 will be interpreted by the courts or what its ultimate impact will be. As of the date of this Official Statement, SMUD is unaware of any fees or charges relating to SMUD's service that would have to be reduced or eliminated because of Proposition 26. However, certain of SMUD's adopted rate increases have been challenged. See "LEGAL PROCEEDINGS – Proposition 26 Lawsuit."

Wildfire Legislation. In September 2016, Governor Brown signed into law Senate Bill 1028 (“SB 1028”), which requires POU’s (including SMUD), IOUs, and electrical cooperatives to construct, maintain and operate their electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by electrical lines and equipment. SB 1028 also requires the governing board of POU’s to make an initial determination whether any portion of that geographical area has a significant risk of catastrophic wildfire resulting from those electrical lines and equipment, based on historical fire data and local conditions, and in consultation with the fire departments or other entities responsible for control of wildfires within the geographical area.

Senate Bill 901 (“SB 901”), signed into law in September 2018 by Governor Brown, further addresses response, mitigation and prevention of wildfires. The bill requires POU’s, including SMUD, before January 1, 2020, and annually thereafter, to prepare a wildfire mitigation plan and present it in a public meeting to their governing board. SB 901 requires POU’s to accept comments on the wildfire mitigation plan from the public, other local and State agencies, and interested parties, and to verify that the plan complies with all applicable rules, regulations, and standards, as appropriate. The bill requires a qualified independent evaluator to review and assess the comprehensiveness of its wildfire mitigation plan and present its report to the board in a public meeting.

In 2019, Governor Newsom released his comprehensive strategy on wildfires, laying the groundwork for legislative discussions on utility wildfire liability and allocating costs associated with catastrophic wildfires, among other things. While the Governor supported a modification of State’s current inverse condemnation doctrine, under which utilities are held liable for wildfire damage without regard to the fault of the utility, no bill was introduced. AB 1054 (Holden) did pass in 2019 that included several provisions for solvent investor owned utilities, including the development of a fund to help pay victim claims for utility ignited wildfires. The bill also created a new Wildfire Safety Division within the CPUC to prioritize wildfire safety throughout the State, and established an appointed Wildfire Safety Advisory Board to advise and make recommendations relating to wildfire safety to this new Division. For POU’s, the bill requires submittal of annual wildfire mitigation plans to the Advisory Board for review and advisory opinions.

Senate Bill 247 (“SB 247”), signed by Governor Newsom on October 2, 2019, establishes notification, audit and reporting guidelines for electrical corporations relating to vegetation management requirements in the wildfire mitigation plan. SB 247 also specifies the qualifications for electrical line clearance tree trimmers performing work to comply with the vegetation management requirements in an electrical corporation’s wildfire mitigation plan and requires that qualified line clearance tree trimmers be paid no less than a specified prevailing wage rate. POU’s are not required to adhere to SB 247, but the market impacts are projected to significantly increase SMUD’s annual vegetation management costs.

Nonstock Security. SMUD sponsored legislation in 2019, Assembly Bill 689, which was signed into law by Governor Newsom on September 5, 2019. This bill expressly allows SMUD the ability to operate a pilot project (effective January 1, 2020, to January 1, 2025), of up to three acquisitions, to hold nonstock security in a corporation or other private entity if acquired as part of a procurement of goods or services from that entity, provided that no separate funding is expended solely for the nonstock security. This will allow SMUD to realize the financial benefits of its investments, partnerships, and intellectual property.

On September 15, 2022, the Board authorized the CEO & GM to enter into a joint collaboration agreement with ESS Tech, Inc. (“ESS”). Under that agreement SMUD would procure from ESS iron flow batteries for utility scale long-duration energy storage applications. The agreement contemplates a multi-year phased deployment of up to 200MW/2GWh of long duration energy storage by 2028. As part of that procurement, SMUD acquired nonstock security in ESS.

Future Regulation

The electric industry is subject to continuing legislative and administrative reform. States and Federal entities routinely consider changes to the way in which they regulate the electric industry. Recently, both further deregulation and forms of additional regulation have been proposed for the industry, which has been highly regulated throughout its history. SMUD is unable to predict at this time the impact any such proposals will have on the operations and finances of SMUD or the electric utility industry generally.

OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

CAISO Market Initiatives

The CAISO routinely conducts a number of initiatives and stakeholder processes that propose certain operational and market changes that impact SMUD. SMUD does and will continue to monitor the various initiatives proposed by the CAISO and participate in its stakeholder processes to ensure that its interests are protected.

SMUD participates in the CAISO market for only a small percentage of energy needs, however, it continues to benefit from its participation in the CAISO's WEIM and is currently exploring further participation in the CAISO's proposed Extended Day Ahead Market ("EDAM") (both the WEIM and EDAM are described further below). Along with monitoring other key market initiatives at the CAISO which impact wholesale energy markets, SMUD will continue to actively participate in all processes related to EIM and EDAM, to ensure both participation models are beneficial to SMUD's customers. Given its success in EIM and active engagement with the CAISO and CAISO leadership, SMUD has earned a key role in the stakeholder processes related to these important and evolving markets.

Resource Adequacy Filing

In September 2005, the State Legislature enacted and the Governor signed into law Assembly Bill 380 ("AB 380"), which requires the CPUC to establish resource adequacy requirements for all LSEs within the CPUC's jurisdiction. In addition, AB 380 requires publicly owned utilities, including SMUD, to meet the most recent resource adequacy standard as adopted by the WECC. In October 2005, the CPUC issued a decision stating that LSEs under its jurisdiction would be required, by June 2006, to demonstrate that they have acquired capacity sufficient to serve their forecast retail customer load plus a 15-17% planning reserve margin. In March 2021, the CPUC issued a decision requiring the three largest investor owned utilities (PG&E, Southern California Edison, and San Diego Gas & Electric) to target a minimum of 2.5% of incremental resources for their planning reserve margin for 2021 and 2022. Subsequently, in December 2021, the CPUC issued another decision that increased the investor-owned utilities' minimum target by an additional 2.5-5% of incremental resources for 2022 (which creates an effective planning reserve margin of 20-22%) and extended this target to 2023. And in June 2022, the CPUC issued a decision adopting a planning reserve margin of 16% for 2023, and 17% for 2024, for all LSEs under its jurisdiction. The WECC has yet to formally adopt a resource adequacy requirement. However, consistent with current WECC practices, SMUD utilizes a 15% planning reserve margin when assessing the need for future resources.

Western Energy Imbalance Market and Extended Day Ahead Market

Federal and state policymakers have long-promoted the development of organized markets in the west as a means (among other reasons) to better integrate intermittent renewable resources into the electric system, the first of which markets is the Western EIM, operated by the CAISO. The CAISO successfully launched the WEIM, a real time only imbalance market, on October 1, 2014, with PacifiCorp as the first participant. Since this time, the WEIM has grown significantly with the additions of NV Energy, Arizona

Public Service, Puget Sound Energy, Portland General Electric, Idaho Power, Powerex, BANC, the Salt River Project, Seattle City Light, the Turlock Irrigation District, the Los Angeles Department of Water and Power, NorthWestern Energy, the Public Service Company of New Mexico, Avista, Tacoma Power, Bonneville Power Administration, and Tucson Electric Power. Additionally, the WEIM footprint will continue to expand further in 2023 with the additions of Avangrid, WAPA Desert Southwest Region, and El Paso Electric. SMUD expects the WEIM to comprise a significant portion of the Western Interconnection in 2023.

To date, participation in the WEIM by SMUD has shown significant financial and operational benefits, in addition to furthering an already favorable working partnership between SMUD and the CAISO to develop solutions to integrate renewable resources in support of carbon reduction goals.

BANC's participation not only signaled the first public power participant in the EIM, but it was also implemented utilizing a unique phased approach, with SMUD (as the largest member of BANC) implementing so-called WEIM Phase 1 in 2019, while the other BANC members and WAPA (the "Phase 2 Parties") joined after further evaluation and approvals in March of 2021.

Part of the BANC Phase 2 participation included reimbursement to SMUD certain upfront infrastructure costs incurred by SMUD in Phase 1 to establish BANC as an WEIM Entity. This reimbursement to SMUD by the Phase 2 Parties has been completed.

The CAISO and WEIM participants, including SMUD and BANC, have participated in developing a design framework to extend the successful WEIM real time framework to the EDAM. Like WEIM, EDAM would broaden the access to regional resources for the reliable integration of renewable resources, only over a longer (day ahead) time horizon by allowing for a more economic and efficient optimization of regional resources by providing grid operators greater time (day ahead as opposed to real time) to commit or decommit units based on market price signals. Only participants in the WEIM will be allowed to extend their participation to EDAM. The CAISO launched a public stakeholder initiative and utilized most of 2022 developing the EDAM design. On February 1, 2023 the CAISO Board of Governors and EIM Governing Body approved the EDAM proposal. Tariff development, regulatory approvals and implementation activities will take place in 2023 and 2024, with expected market go-live first quarter 2025. SMUD (and BANC) will likely need to consider its participation before 2024 if it wishes to on-board in time for the first phase of EDAM participation in 2025. Similar to the process around WEIM participation, SMUD, along with BANC, are performing cost-benefit studies to ensure EDAM participation will expand on the existing WEIM benefits prior to seeking approvals to proceed.

PG&E Bankruptcy

On January 14, 2019, PG&E and its parent company, PG&E Corporation, announced their intention to file, on or about January 29, 2019, for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code (the "Bankruptcy Code") mainly as a result of wildfire liability claims and exposure. On January 29, 2019, PG&E and PG&E Corporation filed for bankruptcy protection under Chapter 11 of the Bankruptcy Code (the "Bankruptcy Code"). On May 28, 2020, the CPUC approved PG&E's Plan of Reorganization. On June 20, 2020 the United States Bankruptcy Court for the Northern District of California confirmed PG&E's Plan of Reorganization. SMUD does not anticipate any material impacts to SMUD in connection with PG&E's Plan of Reorganization.

In addition, other electric utilities, including the other major IOUs in the State, Southern California Edison and San Diego Gas & Electric Company, have experienced credit rating downgrades as a result of potential wildfire liabilities exposure, which may have implications for the electric market generally.

Other Factors

The electric utility industry in general has been, or in the future may be, affected by a number of other factors which could impact the financial condition and competitiveness of many electric utilities and the level of utilization of generating and transmission facilities. In addition to the factors discussed above, such factors include, among others, (a) effects of compliance with rapidly changing environmental, safety, licensing, regulatory and legislative requirements other than those described above; (b) changes resulting from conservation and demand side management programs on the timing and use of electric energy; (c) changes resulting from a national energy policy; (d) effects of competition from other electric utilities (including increased competition resulting from mergers, acquisitions, and “strategic alliances” of competing electric and natural gas utilities and from competitors transmitting less expensive electricity from much greater distances over an interconnected system) and new methods of, and new facilities for, producing low cost electricity; (e) the repeal of certain federal statutes that would have the effect of increasing the competitiveness of many IOUs; (f) increased competition from independent power producers and marketers, brokers and federal power marketing agencies; (g) “self-generation” or “distributed generation” (such as solar, microturbines and fuel cells) by industrial and commercial customers and others; (h) issues relating to the ability to issue tax exempt obligations, including severe restrictions on the ability to sell to nongovernmental entities electricity from generation projects and transmission service from transmission line projects financed with tax exempt obligations; (i) effects of inflation on the operating and maintenance costs of an electric utility and its facilities; (j) changes from projected future load requirements; (k) increases in costs and uncertain availability of capital; (l) issues relating to supply chains and the uncertain availability or increased costs of necessary materials; (m) shifts in the availability and relative costs of different fuels (including the cost of natural gas); (n) sudden and dramatic increases in the price of energy purchased on the open market that may occur in times of high peak demand in an area of the country experiencing such high peak demand, such as has occurred in the State; (o) issues relating to risk management procedures and practices with respect to, among other things, the purchase and sale of natural gas, energy and transmission capacity; (p) other legislative changes, voter initiatives, referenda and statewide propositions; (q) effects of changes in the economy; (r) effects of possible manipulation of the electric markets; (s) natural disasters or other physical calamities, including, but not limited to, earthquakes, droughts, severe weather, wildfires and floods; (t) changes to the climate, including increasing volatility in rainfall in the Western United States and a reduction in the depth and duration of the Sierra snowpack; (u) issues relating to cyber-security; and (v) outbreaks of infectious diseases or the occurrence of pandemics. Any of these factors (as well as other factors) could have an adverse effect on the financial condition of any given electric utility, including SMUD’s electric utility, and likely will affect individual utilities in different ways.

SMUD is unable to predict what impact such factors will have on the business operations and financial condition of SMUD’s electric system, but the impact could be significant. SMUD has taken major steps to mitigate the impacts of many of the changes. This Official Statement includes a brief discussion of certain of these factors. This discussion does not purport to be comprehensive or definitive, and these matters are subject to change subsequent to the date hereof. Extensive information on the electric utility industry is available from the legislative and regulatory bodies and other sources in the public domain, and potential purchasers of the [2023 Bonds] should obtain and review such information.

APPENDIX B

**2022 AND 2021 CONSOLIDATED FINANCIAL STATEMENTS
AND REPORT OF INDEPENDENT ACCOUNTANTS**

APPENDIX C

BOOK-ENTRY SYSTEM

The information in this Appendix regarding DTC has been provided by DTC, and SMUD takes no responsibility for the accuracy or completeness thereof. SMUD cannot and does not give any assurances that DTC, DTC Participants or Indirect Participants will distribute the Beneficial Owners either (a) payments of interest or principal with respect to the 2023 Series K Bonds or (b) certificates representing ownership interest in or other confirmation of ownership interest in the 2023 Series K Bonds, or that they will so do on a timely basis or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Official Statement.

The Depository Trust Company (“DTC”) New York, NY, will act as securities depository for the 2023 Series K Bonds. The 2023 Series K Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Bond certificate will be issued for each maturity of the 2023 Series K Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world’s largest depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues and money market instruments from over 100 countries that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has a Standard & Poor’s rating of AA+. The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the 2023 Series K Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2023 Series K Bonds on DTC’s records. The ownership interest of each actual purchaser of each 2023 Series K Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2023 Series K Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their beneficial ownership interests in the 2023 Series K Bonds, except in the event that use of the book-entry system for the 2023 Series K Bonds is discontinued.

To facilitate subsequent transfers, all 2023 Series K Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of the 2023 Series K Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2023 Series K Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2023 Series K Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the 2023 Series K Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2023 Series K Bonds, such as redemptions, tenders, defaults, and proposed amendments to the bond documents. For example, Beneficial Owners of the 2023 Series K Bonds may wish to ascertain that the nominee holding the 2023 Series K Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners.

Redemption notices shall be sent to DTC. If less than all of a maturity of the 2023 Series K Bonds is being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the 2023 Series K Bonds of such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the 2023 Series K Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to SMUD as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2023 Series K Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium, redemption proceeds and interest payments on the 2023 Series K Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from SMUD or the Trustee, on a payment date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participants and not of DTC, its nominee, the Trustee or SMUD, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, redemption proceeds and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Trustee. Disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of the Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the 2023 Series K Bonds at any time by giving reasonable notice to SMUD or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, bond certificates are required to be printed and delivered.

SMUD may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, bond certificates for such 2023 Series K Bonds will be printed and delivered to DTC.

Neither SMUD or the Trustee will have any responsibility or obligation to Participants, to Indirect Participants or to any Beneficial Owner with respect to (i) the accuracy of any records maintained by DTC, any Participant, or any Indirect Participant; (ii) the payment by DTC or any Participant or Indirect Participant of any amount with respect to the principal of or premium, if any, or interest on the 2023 Series K Bonds; (iii) any notice which is permitted or required to be given to Holders under the Resolution; (iv) the selection by DTC, any Participant or any Indirect Participant of any person to receive payment in the event of a partial redemption of 2023 Series K Bonds; (v) any consent given or other action taken by DTC as Bondholder; or (vi) any other procedures or obligations of DTC, Participants or Indirect Participants under the book-entry system.

APPENDIX D

SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION

The following is a summary of certain provisions of the Resolution. Other provisions of the Resolution are described under the captions “THE 2023 SERIES K BONDS” and “SECURITY FOR THE BONDS.” This summary is not to be considered a full statement of the terms of the Resolution and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in the Resolution.

Between July 1997 and August 2003, SMUD received consents to amend the Resolution from the owners of the requisite percentage of Outstanding Bonds. Pursuant to the authority granted by such consents, SMUD amended the Resolution in October 2003 by adopting the Forty-Eighth Supplemental Resolution and the Forty-Ninth Supplemental Resolution. The following summary of the Resolution reflects such amendments.

The purchasers of the 2023 Series K Bonds, by virtue of their purchase of the 2023 Series K Bonds, will consent to certain amendments to the Resolution (the “Proposed Amendments”). Such amendments are described in *bold italic* font in the forepart of this Official Statement under “SECURITY FOR THE BONDS – Rates and Charges” and “—Limitations on Additional Obligations Payable from Revenues” and in this summary of the Resolution under the captions “Certain Definitions” and “Reserve Fund for Certain Bonds.” The written consents to the Proposed Amendments of the holders and registered owners of at least 60% of the Bonds outstanding have been filed with SMUD or the Trustee, as required by the Resolution. However, while certain Bonds remain outstanding SMUD must also obtain the written consents of certain bond insurers to implement the Proposed Amendments. SMUD expects to implement the Proposed Amendments when the written consents of such bond insurers are obtained or when the Bonds insured by such bond insurers are no longer outstanding. The final maturity date of the insured Bonds is July 1, 2024.

Certain Definitions

“Assumed Interest Payments” means for any fiscal year or period interest which would accrue during such fiscal year or period on an amount equal to the then unamortized balance of the remaining sum of Assumed Principal Payments at the Assumed Interest Rate.

“Assumed Interest Rate” for any Parity Bond means an interest rate equal to the “Bond Buyer Revenue Bond Index” most recently published in The Bond Buyer prior to the date of issuance of the Parity Bond to which the Assumed Interest Rate is applicable.

“Assumed Principal Payments” means for any fiscal year or period the sum of all amortized portions of each Excluded Principal Payment which fall within such fiscal year or period after the Excluded Principal Payments have been amortized (for purposes of this definition) equally over the years (pro rata in the case of a partial year) in the period commencing on the date of issuance of the Parity Bonds to which such Excluded Principal Payment relates and ending on the date which is 30 years from such date of issuance. Notwithstanding the foregoing, if Parity Bonds determined by SMUD to be an Excluded Principal Payment are refinanced with Parity Bonds determined by SMUD to be another Excluded Principal Payment, (1) Assumed Principal Payments with respect to the refinancing Parity Bonds shall not include any amount of principal which has previously been assumed amortized with respect to the refinanced Parity Bonds and (2) the period over which the refinancing Parity Bonds shall be assumed to be amortized shall be the period commencing on the date of issuance of the refinancing Parity Bonds and ending on the date which is 30 years from the date of issuance of the refinanced Parity Bonds.

“Electric System” means the entire electric system of SMUD, together with all additions, betterments, extensions and improvements.

“Energy Payments” means, when used with respect to the Electric System, all actual costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable for purchased power (including power purchased from any special district included within the boundaries of SMUD), electric and thermal energy and capacity under contracts providing for payments by SMUD for electric or thermal energy or capacity whether or not such energy or capacity is delivered or capable of being delivered or otherwise made available to or received by or for the account of SMUD.

“Excluded Principal Payments” means each payment of principal on Parity Bonds which the Board of Directors of SMUD determines (on a date not later than the date of issuance of such Parity Bonds) that SMUD intends to refinance at or prior to the maturity date(s) of such Parity Bonds or otherwise to pay with moneys which are not Revenues. No such determination shall affect the security for such Parity Bonds or the obligation of SMUD to pay such payments from Revenues.

“Financial Products Agreement” means an interest rate swap, cap, collar, option, floor, forward or other hedging agreement, arrangement or security, however denominated, entered into by SMUD with a Qualified Provider not for investment purposes but with respect to specific Parity Bonds for the purpose of (1) reducing or otherwise managing SMUD’s risk of interest rate changes or (2) effectively converting SMUD’s interest rate exposure, in whole or in part, from a fixed rate exposure to a variable rate exposure, or from a variable rate exposure to a fixed rate exposure.

“Financial Product Payments” means payments periodically required to be paid to a counterparty by SMUD pursuant to a Financial Products Agreement.

“Financial Product Receipts” means amounts periodically required to be paid to SMUD by a counterparty pursuant to a Financial Products Agreement.

“Maintenance and Operation Costs” means all actual maintenance and operation costs incurred by SMUD (including purchased power and fuel costs) or charges therefor made in conformity with generally accepted accounting principles, exclusive in all cases of depreciation, or obsolescence charges or reserves therefor, amortization of intangibles or other entries of a similar nature, interest charges and charges for the payment of principal of SMUD debt.

“Net Revenues” for any fiscal period means the sum of (a) the Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by SMUD from the Rate Stabilization Fund for treatment as Revenues for such fiscal period, less the sum of (c) all Maintenance and Operation Costs for such fiscal period, (d) all Energy Payments for such fiscal period not included in Maintenance and Operation Costs for such fiscal period, and (e) the amounts, if any, withdrawn by SMUD from Revenues for such fiscal period for deposit in the Rate Stabilization Fund pursuant to the Resolution.

“Parity Bonds” includes the Bonds and all revenue bonds issued on a parity with the Bonds as provided or permitted in the Resolution. No Parity Bonds (other than the Bonds) are currently outstanding.

“Qualified Provider” means any financial institution or insurance company which is a party to a Financial Products Agreement if the unsecured long-term debt obligations of such financial institution or insurance company (or of the parent or a subsidiary of such financial institution or insurance company if such parent or subsidiary unconditionally guarantees the performance of such financial institution or insurance company under such Financial Products Agreement and the Trustee receives an opinion of

counsel to the effect that such guarantee is a valid and binding agreement of such parent or subsidiary), or obligations secured or supported by a letter of credit, contract, guarantee, agreement, insurance policy or surety bond issued by such financial institution or insurance company (or such guarantor parent or subsidiary), are rated in one of the two highest rating categories of a national rating agency (without regard to any gradation or such rating category) at the time of the execution and delivery of the Financial Products Agreement.

“Rate Stabilization Fund” means the fund by that name established in the Resolution. From time to time, after provision for debt service, SMUD may deposit in the Rate Stabilization Fund from remaining Revenues such amounts as SMUD shall determine, provided that deposits may be made until (but not after) the date 120 days after the end of such fiscal year. SMUD may withdraw amounts from the Rate Stabilization Fund only for inclusion in Revenues for any fiscal year, such withdrawals to be made until (but not after) 120 days after the end of such fiscal year. All interest or other earnings on deposits in the Rate Stabilization Fund shall be withdrawn therefrom and accounted for as Revenues. Notwithstanding the foregoing, no deposit of Revenues to the Rate Stabilization Fund may be made to the extent such Revenues were included in an engineer’s certificate submitted in connection with the issuance of additional revenue bonds payable from Revenues and withdrawal of the Revenues to be deposited in the Rate Stabilization Fund from the Revenues employed in rendering said engineer’s certificate would have caused noncompliance with the provisions of the Resolution restricting issuance of additional obligations or securities payable from Revenues or to the extent any withdrawal of amounts from remaining Revenues for the Rate Stabilization Fund for any fiscal year would have reduced the debt service ratio referred to in this Appendix under the caption “Reserve Fund for Certain Bonds” to or below 1.40.

“Revenues” means all charges received for, and all other income and receipts derived by SMUD from the operation of the Electric System, or arising from the Electric System (consisting primarily of income derived from the sale or use of electric energy generated, transmitted or distributed by facilities of the Electric System, but also including receipts from the sale of property pertaining to the Electric System or incidental to the operation of the Electric System or from services performed by SMUD in connection with the Electric System and revenues derived from certain wholesale, but not retail, sales of water), but exclusive in every case of any moneys derived from the levy or collection of taxes upon any taxable property in SMUD.

“Subsidy” means any subsidy, reimbursement or other payment from the federal government of the United States of America under the American Recovery and Reinvestment Act of 2009 (or any similar legislation or regulation of the federal government of the United States of America or any other governmental entity or any extension of any of such legislation or regulation).

Reserve Fund for Certain Bonds

The Electric Revenue Bond Reserve Fund (the “Reserve Fund”) is created under the Resolution. The Reserve Fund secures all Bonds issued prior to January 1, 2004 that are currently outstanding (and not otherwise deemed to be paid and discharged under the Resolution) and may secure additional Bonds issued in the future. However, the Reserve Fund does not secure and will not be available to pay debt service on the 2023 Series K Bonds.

After the close of each fiscal year, SMUD shall determine the ratio (herein called the “debt service ratio”) of (1) the Net Revenues during said fiscal year to (2) the maximum annual debt service during the period of three fiscal years next following said fiscal year on all Bonds and Parity Bonds then outstanding. For this purpose, the term “maximum annual debt service” shall mean the sum of (i) the interest falling due on serial bonds and term bonds, (ii) the principal amount of serial bonds falling due by

their terms, and (iii) the amount of minimum sinking fund payments required, as computed for the year in which such sum shall be a maximum. Interest during construction which has been funded and provided for shall not be included in “minimum annual debt service” for the purpose of the above calculation.

So long as the debt service ratio shall exceed 1.40, the amount required to be maintained in the Reserve Fund shall be an amount such that the amount in the combined reserve funds of all Parity Bonds then outstanding will at no time be less than the current annual interest requirements on all then outstanding Parity Bonds, except only bonds (if any) for which payment has been provided in advance. If the debt service ratio in any fiscal year shall fall below 1.40, the Treasurer shall set aside in the Reserve Fund or in any other reserve fund or funds established for any one or more issues of the Parity Bonds (on or before the first day of each month of the next succeeding fiscal year) from the first available Net Revenues an amount not less than 15% of the sum of the current monthly interest requirements of all Parity Bonds then outstanding until the next year in which the debt service ratio shall exceed 1.40 or until the aggregate amount in the combined reserve funds established for all of the Parity Bonds (including the Reserve Fund) is equal to the maximum annual debt service on all of the Parity Bonds then outstanding, whichever shall first occur.

For purposes of the above calculation, the interest rates of Bonds which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Bonds bear a rate or rates of interest for a known period or periods of time, such interest rate or rates for such period or periods, and thereafter, for the portion of the calculation period not covered by such known period or periods, the interest rate shall be the greater of the numerical maximum rate that such Bonds may vary or be adjusted to and the numerical maximum rate (if any) that the interest rate for such Bonds may be fixed to, in both cases as set forth in the supplemental resolution authorizing such Bonds, or if such rate or rates have been increased in accordance with such supplemental resolution at such increased rate or rates.

Any amount in the Reserve Fund at any time in excess of the balance required to be then maintained therein shall be released to SMUD for any SMUD use.

SMUD shall not be required, notwithstanding anything herein contained, to maintain in the combined reserve funds appertaining to all Parity Bonds of SMUD, an aggregate amount in excess of the maximum annual debt service requirements in any subsequent fiscal year on all of the then outstanding Parity Bonds.

Any moneys at any time in any of said reserve funds shall be held by the Treasurer in trust for the benefit of the holder or holders from time to time of the Bonds and the coupons appertaining thereto entitled to be paid therewith, and SMUD shall not have any beneficial right or interest in any such moneys.

Notwithstanding the foregoing, a Supplemental Resolution adopted after the Forty-Eighth Supplemental Resolution may provide that a Series of Bonds issued pursuant to such Supplemental Resolution shall not be secured by the Reserve Fund. In such event, (i) payments of the principal of and interest on such Bonds shall be excluded from all calculations made in respect of the amount to be maintained in the Reserve Fund and (ii) amounts on deposit in the Reserve Fund shall not be applied to the payment of the principal of or interest on such Bonds, even if no other moneys are available therefor.

The 2023 Series K Bonds are not secured by the Reserve Fund.

In lieu of maintaining and depositing moneys in the Reserve Fund, SMUD may maintain and deposit in the Reserve Fund, for the sole benefit of the holders of Parity Bonds, a letter of credit (1) which is issued by a bank with a credit rating at the time of deposit of such letter of credit into the Reserve Fund within one of the top two rating categories (without regard to any refinement or graduation of such rating category by numerical modifier or otherwise) of Moody's Investors Service ("Moody's") and Standard & Poor's Rating Group, a division of The McGraw-Hill Companies, Inc. ("S&P"), (2) the repayment obligation with respect to which is not secured by a lien on assets of SMUD senior to any lien which secures the Bondholders and (3) which has a term of at least 364 days from the date of issuance thereof. If the credit rating of the bank issuing such letter of credit falls below such top two rating categories, SMUD shall within twelve months of such downgrading either (a) substitute a new letter of credit satisfying the requirements of this paragraph, (b) fund the Reserve Fund through the deposit of cash or an irrevocable surety bond policy satisfying the requirements of the immediately succeeding paragraph or (c) fund the Reserve Fund through a combination of (a) and (b). At least 120 days prior to the expiration date of a letter of credit on deposit in the Reserve Fund, SMUD shall either (a) substitute a new letter of credit satisfying the requirements of this paragraph, (b) fund the Reserve Fund through the deposit of cash or an irrevocable surety bond policy satisfying the requirements of the immediately succeeding paragraph or (c) fund the Reserve Fund through a combination of (a) and (b). Any such letter of credit shall permit SMUD to draw amounts thereunder for deposit in the Reserve Fund which, together with any moneys on deposit in, or surety bond policy available to fund, the Reserve Fund, are not less than the balance required to then be maintained in the Reserve Fund (the "Reserve Fund Requirement") and which may be applied to any purpose for which moneys in the Reserve Fund may be applied. SMUD shall make a drawing on such letter of credit and deposit the moneys obtained from drawing in the Reserve Fund (a) whenever moneys are required for the purposes for which Reserve Fund moneys may be applied, and (b) prior to any expiration or termination thereof; provided, however, that no such drawing need be made if other moneys or an irrevocable surety bond are available in the Reserve Fund in the amount of the Reserve Fund Requirement.

In lieu of maintaining and depositing moneys in the Reserve Fund, SMUD also may maintain and deposit in the Reserve Fund, for the sole benefit of the holders of the Bonds, an irrevocable surety bond policy (1) which is issued by a bond insurance company with a claims-paying ability rating at the time of deposit of such surety bond policy into the Reserve Fund within one of the top two rating categories (without regard to any refinement or graduation of such rating category by numerical modifier or otherwise) from Moody's and S&P, (2) the repayment obligation with respect to which is not secured by a lien on assets of SMUD senior to any lien which secures the Bondholders and (3) has a term of at least 364 days from the date of issuance thereof. If the credit rating of the bond insurance company issuing such surety bond policy falls below such top two rating categories, SMUD shall, within twelve months of such downgrading, either (a) substitute a new surety bond policy satisfying the requirements of this paragraph, (b) fund the Reserve Fund through the deposit of cash or a letter of credit satisfying the requirements of the immediately preceding paragraph or (c) fund the Reserve Fund through a combination of (a) and (b). At least 120 days prior to the expiration date of a surety bond policy on deposit in the Reserve Fund, SMUD shall either (a) substitute a new surety bond policy satisfying the requirements of this paragraph, (b) fund the Reserve Fund through the deposit of cash or a letter of credit satisfying the requirements of the immediately preceding paragraph or (c) fund the Reserve Fund through a combination of (a) and (b). Any such surety bond policy shall permit SMUD to obtain amounts thereunder for deposit in the Reserve Fund which, together with any moneys on deposit in, or letter of credit available to fund, the Reserve Fund, are not less than the Reserve Fund Requirement and which may be applied to any purpose for which moneys in the Reserve Fund may be applied. SMUD shall make a drawing on such surety bond policy and deposit the proceeds derived from such drawing in the Reserve Fund (a) whenever moneys are required for the purposes for which Reserve Fund moneys may be applied, and (b) prior to

any expiration or termination thereof; provided, however, that no such drawing need be made if other moneys or a letter of credit are available in the Reserve Fund in the amount of the Reserve Fund Requirement.

Notwithstanding anything to the contrary in the prior two paragraphs, if at any time that there is on deposit in the Reserve Fund a combination of cash, a letter of credit and/or a surety bond as contemplated above, SMUD shall draw first on such cash to the extent required and available, then on (1) such surety bond and letter of credit on a pro rata basis (if both a surety bond and letter of credit are available) to the extent required and available, or (2) such surety bond or letter of credit (if either a surety bond or letter of credit, but not both, is available) to the extent required and available.

For purposes of calculating the “debt service ratio” and, unless otherwise specified in a Supplemental Resolution providing for the issuance of a series of Parity Bonds, the amount required to be maintained in the Reserve Fund as described above: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that SMUD receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by SMUD with respect to or in connection with such Parity Bonds during such period of time.

Additional Covenants

The Resolution contains the following additional covenants, among others:

1. That the Electric System will be maintained in good repair, working order and condition at all times, and will be continuously operated in an efficient and economical manner.
2. That no electric energy shall be supplied free by SMUD, and a reasonable wholesale charge will be made for water distributed at any cost to SMUD and such charge will be deemed Revenues; but SMUD may supply without charge water furnished to it without distribution cost, and any moneys received from any retail sales of water will not be deemed Revenues.
3. That all taxes and governmental charges and other lawful claims which might become a lien on the Electric System or the Revenues or impair the security of the Bonds will be paid and discharged when due.
4. That SMUD will comply with all lawful orders of any governmental agency or authority having jurisdiction in the premises (except while the validity or application thereof is being contested in good faith) and with all necessary permits and licenses issued by the NRC.
5. That no lease or agreement will be entered into, or sale or other disposition of essential property made, that would impair the operation of the Electric System or the rights of Bondholders with respect to the Revenues; provided, however, that notwithstanding the foregoing or any other provision of the Master Resolution, SMUD may sell or otherwise dispose of its accounts receivable and customer loan balances due to SMUD provided that SMUD delivers to the Trustee:
 - (a) a Certificate of SMUD to the effect that the amount derived by SMUD from the sale or other disposition of such accounts receivable or loan balances is a result of the sale or other disposition of such accounts receivable or loan balances upon fair and reasonable terms no

less favorable to SMUD than the terms of a comparable arm's-length transaction treated as a sale and not a loan under generally accepted accounting principles; and

(b) a written statement or report of an independent certified public accountant to the effect that, based on the audited financial statements of SMUD for the most recent fiscal year for which audited financial statements are available and after giving effect to such transaction by reducing Revenues for such fiscal year by the difference between the face amount of such accounts receivable or loan balances and the amount derived by SMUD from the sale or other disposition of such accounts receivable or loan balances, the debt service ratio computed pursuant to the Master Resolution would not have been reduced to less than 1.40:1.0.

6. That proper records and accounts will be maintained of all transactions relating to the Electric System and the Revenues (open to inspection by the Trustee and the holders of not less than 10 percent in principal amount of the Bonds), to be audited annually by an independent certified public accountant within 90 days after close of the fiscal year, and copies of such financial statements supplied to Bondholders on request.

7. That insurance adequate in amounts and as to risks covered will be maintained against such risks as are usually insurable in connection with similar electric systems, and in addition public liability and property damage insurance in amounts not less than \$1,000,000 per accident and adequate fidelity bonds on all officers and employees of SMUD handling or responsible for SMUD funds, subject in each case to the condition that such insurance is obtainable at reasonable rates and upon reasonable terms and conditions. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – INSURANCE” attached to this Official Statement for a description of SMUD’s insurance.

8. That the net proceeds realized by SMUD in the event all or any part of the Electric System is taken by eminent domain proceedings will be applied to the redemption or retirement of all Bonds and Parity Bonds if sufficient therefor, and, if not, then pro rata to the redemption or retirement of Bonds and Parity Bonds or to new facilities if the additional Revenues to be derived therefrom will sufficiently offset the loss of Revenues resulting from such eminent domain so that the ability of SMUD to meet its obligations will not be substantially impaired.

9. That SMUD will at all times use its best efforts to maintain the powers, functions and duties now reposed in it pursuant to law.

10. That SMUD will establish and at all times maintain and collect rates and charges for the sale or use of its electric energy sufficient to permit SMUD to purchase power or issue and sell Bonds or Parity Bonds to finance additions, betterments, extensions and improvements to the Electric System as may be reasonably necessary to satisfy its then projected electric demand upon its Electric System, and that unless the Board determines that SMUD will be able to satisfy such demand through the purchase of electric energy, SMUD will proceed with all reasonable diligence to issue and sell such Bonds or Parity Bonds.

11. That SMUD will not create, or permit the creation of, any mortgage or lien upon the Electric System or any property essential to the proper operation of the Electric System or to the maintenance of the Revenues. SMUD will not create, or permit the creation of, any pledge, lien, charge or encumbrance upon the Revenues except only as provided in the Master Resolution; provided that, notwithstanding the foregoing or any other provision of the Master Resolution, SMUD may create a pledge, lien, charge or encumbrance upon its accounts receivable and customer loan balances due to SMUD (which pledge, lien, charge or encumbrance shall be prior to any pledge, lien, charge or

encumbrance created or made pursuant to the Master Resolution, including without limitation the pledge of Revenues made pursuant to the Master Resolution) to secure indebtedness with a term of one year or less provided that the principal amount of such indebtedness does not exceed 50% of the aggregate face amount of the accounts receivable and customer loan balances due to SMUD as shown on SMUD's most recent audited financial statements.

Amendment of the Resolution

The Resolution and the rights and obligations of SMUD and of the holders of the Bonds may be modified or amended at any time pursuant to the affirmative vote at a meeting of Bondholders, or with the written consent without a meeting, of the holders of 60 percent in aggregate principal amount of the Bonds then outstanding, provided that no such modification or amendment shall (i) extend the fixed maturity of any Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon or reduce any premium payable upon the redemption thereof, without the consent of the holder of each Bond so affected, or (ii) reduce the aforesaid percentage of Bonds required for consent to an amendment or modification, without the consent of the holders of all the Bonds then outstanding. Modifications or amendments may be made, without the consent of any Bondholders, to add covenants of SMUD or to surrender rights reserved by SMUD in the Resolution, to cure ambiguities or defective or inconsistent provisions or in regard to questions arising under the Resolution without adversely affecting the interests of the Bondholders, or to provide for the issuance of a series of Bonds, subject to the provisions contained in the Resolution with respect thereto.

Events of Default and Remedies of Bondholders

The Resolution declares each of the following to be an event of default:

- (a) Failure to pay the principal of and premium on any Bond when due and payable;
- (b) Failure to pay any installment of interest on any Bond when due and payable, if such default continues for a period of 30 days;
- (c) Default by SMUD in the observance of any of the covenants, agreements or conditions on its part in the Resolution or in the Bonds, if such default continues for a period of 60 days after written notice thereof (specifying such default and requiring the same to be remedied) has been given to SMUD by the Trustee, or to SMUD and the Trustee by the holders of not less than 25 percent in aggregate principal amount of the Bonds at the time outstanding; and
- (d) If, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of SMUD or of the whole or any substantial part of its property, and such custody or control shall not be terminated or stayed within 60 days.

In the event of default, the Trustee or the holders of not less than a majority in aggregate principal amount of the outstanding Bonds may, upon written notice to SMUD, declare the principal of all outstanding Bonds, and the interest accrued thereon, to be due and payable immediately. The Trustee is appointed as trustee to represent Bondholders and may take such action as may seem appropriate to it, and, upon the written request of the holders of 25 percent in aggregate principal amount of the outstanding Bonds, and upon being furnished with indemnity satisfactory to it, will take such action on behalf of Bondholders as is specified in such written request. Each Bondholder is entitled to proceed to protect and enforce the rights vested in such holder by the Resolution by such appropriate judicial proceedings as such holder deems most effectual.

The rights of Bondholders are limited and restricted to the use and application of Revenues as provided in the Resolution and do not extend to the levy of any attachment or execution upon or forfeiture of any of the properties of SMUD or to any moneys derived by SMUD from the levy or collection of taxes.

In addition to the limitations on remedies contained in the Resolution, the rights and remedies provided by the Bonds and the Resolution, as well as the enforcement by SMUD of contracts with customers of the Electric System, may be limited by and are subject to bankruptcy, insolvency, reorganization and other laws affecting the enforcement of creditors' rights.

Refunding of 2023 Series K Bonds

If Refunding Bonds are issued for the purpose of refunding 2023 Series K Bonds, then SMUD is authorized to apply proceeds of the sale of such Refunding Bonds to the payment of the purchase price of direct noncallable obligations of the United States of America ("Treasury Obligations") to be held by the Trustee to insure the payment or retirement at or before maturity of all or a portion of the outstanding 2023 Series K Bonds. Upon deposit with the Trustee, in trust, of money or Treasury Obligations (including, but not limited to, direct obligations of the United States of America issued in book-entry form on the books of the Department of the Treasury of the United States of America), or any combination thereof, sufficient, together with the interest to accrue on any such Treasury Obligations, to pay or redeem all or a portion of 2023 Series K Bonds then outstanding at or before their maturity date, all liability of SMUD in respect of such 2023 Series K Bonds shall cease, determine and be completely discharged, and the holders thereof shall thereafter be entitled only to payment by SMUD out of the money and Treasury Obligations deposited with the Trustee for their payment. If the liability of SMUD shall cease and determine with respect to all or a portion of the 2023 Series K Bonds, then said 2023 Series K Bonds shall not be considered to be outstanding Bonds for any purpose of the Resolution.

Discharge of Resolution

The Resolution may be discharged by depositing with the Trustee in trust, moneys or Federal Securities or general obligation bonds of the State of California, in such amount as the Trustee shall determine will, together with the interest to accrue thereon, be fully sufficient to pay and discharge the indebtedness on all Bonds at or before their respective maturity dates.

Investment of Funds

Moneys in any fund established by the Resolution may be invested in bonds, notes, certificates of indebtedness, bills, bankers acceptances or other securities in which funds of SMUD may be legally invested as provided by the law in effect at the time of such investment. Currently this investment authority includes, among other things, the Local Agency Investment Fund which is administered by the Treasurer of the State of California for the investment of funds belonging to local agencies in the State of California.

APPENDIX E

PROPOSED FORM OF LEGAL OPINION FOR 2023 SERIES K BONDS

[subject to internal review]

[Closing Date]

Sacramento Municipal Utility District
Sacramento, California

Sacramento Municipal Utility District
Electric Revenue Refunding Bonds, 2023 Series K
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the Sacramento Municipal Utility District (“SMUD”) in connection with the issuance of \$ _____ aggregate principal amount of Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2023 Series K (the “2023 Series K Bonds”), issued pursuant to Resolution No. 6649 of the Board of Directors of SMUD, adopted January 7, 1971 (the “Master Resolution”), as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. 23-05-[], adopted May 19, 2023 (the “Sixty-Sixth Supplemental Resolution”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution.

In such connection, we have reviewed the Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after original delivery of the 2023 Series K Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after original delivery of the 2023 Series K Bonds on the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. Our engagement with respect to the 2023 Series K Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Resolution and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the 2023 Series K Bonds to be included in gross income for federal income tax purposes.

We call attention to the fact that the rights and obligations under the 2023 Series K Bonds, the Resolution and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to

or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against governmental entities such as SMUD. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement, dated [____], 2023, or other offering material relating to the 2023 Series K Bonds and express no opinion or view with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The 2023 Series K Bonds constitute the valid and binding limited obligations of SMUD.
2. The Resolution, including the Sixty-Sixth Supplemental Resolution, has been duly adopted by, and constitutes the valid and binding obligation of, SMUD. The Resolution creates a valid pledge, to secure the payment of the principal of and interest on the 2023 Series K Bonds, of the Net Revenues, subject to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution.
3. Interest on the 2023 Series K Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Interest on the 2023 Series K Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. We observe that, for tax years beginning after December 31, 2022, interest on the 2023 Series K Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2023 Series K Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP

per

APPENDIX F

FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the “Disclosure Agreement”) is executed and delivered by the Sacramento Municipal Utility District (the “Issuer”) and U.S. Bank Trust Company, National Association, in its capacity as Dissemination Agent (the “Dissemination Agent”) in connection with the issuance of \$_____ aggregate principal amount of Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2023 Series K (the “2023 Series K Bonds”). The 2023 Series K Bonds are being issued pursuant to the Issuer’s Resolution No. 6649, adopted on January 7, 1971, as amended and supplemented by supplemental resolutions, including Resolution No. 23-05-[], adopted on May 19, 2023 (the “Resolution”). Pursuant to Section 143.11 of the Resolution, the Issuer and the Dissemination Agent covenant and agree as follows:

SECTION 1. Purpose of the Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Issuer and the Dissemination Agent for the benefit of the Holders and Beneficial Owners of the 2023 Series K Bonds and in order to assist the Participating Underwriters in complying with S.E.C. Rule 15c2-12(b)(5).

SECTION 2. Definitions. In addition to the definitions set forth in the Resolution, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

“Annual Report” shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

“Beneficial Owner” shall mean any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2023 Series K Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

“Disclosure Representative” shall mean the Treasurer of the Issuer or his or her designee, or such other officer or employee as the Issuer shall designate in writing to the Trustee from time to time.

“Dissemination Agent” shall mean U.S. Bank Trust Company, National Association, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the Issuer and which has filed with the Trustee a written acceptance of such designation.

“EMMA” shall mean the MSRB’s Electronic Municipal Market Access system.

“Financial Obligation” shall mean, for purposes of the Listed Events set out in Section 5(a)(15) and Section 5(a)(16), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.

“MSRB” shall mean the Municipal Securities Rulemaking Board.

“Participating Underwriters” shall mean any of the original underwriters of the 2023 Series K Bonds required to comply with the Rule in connection with offering of the 2023 Series K Bonds.

“Repository” shall mean the MSRB through EMMA or any other entity or system designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule.

“Rule” shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

“State” shall mean the State of California.

SECTION 3. Provision of Annual Reports.

(a) The Issuer shall, or shall cause the Dissemination Agent to, not later than one hundred eighty (180) days after the end of the Issuer’s fiscal year (presently December 31), commencing with the report for the 2023 Fiscal Year, provide to each Repository an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may include by reference other information as provided in Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date. If the fiscal year changes for the Issuer, the Issuer shall give notice of such change in the same manner as for a Listed Event under Section 5 hereof.

(b) Not later than fifteen (15) Business Days prior to the dates specified in subsection (a) for providing the Annual Report to each Repository, the Issuer shall provide its respective Annual Report to the Dissemination Agent. If by such date, the Dissemination Agent has not received a copy of the Annual Report from the Issuer, the Dissemination Agent shall contact the Issuer to determine if the Issuer is in compliance with the first sentence of this subsection (b).

(c) If the Dissemination Agent is unable to verify that an Annual Report of the Issuer has been provided to each Repository by the date required in subsection (a), the Dissemination Agent shall send a notice to each Repository and the MSRB (if the MSRB is not a Repository) in substantially the form attached as Exhibit A.

(d) The Dissemination Agent shall:

(1) determine each year prior to the date for providing the Annual Report the name and address of each Repository and then-applicable rules and procedures for filing the Annual Report with each Repository, if any; and

(2) file a report with the Issuer certifying that the Annual Report has been provided pursuant to this Disclosure Agreement, stating the date it was provided and listing each Repository to which it was provided.

SECTION 4. Content of Annual Reports.

(a) The Issuer’s Annual Report shall contain or include by reference the following:

(1) The audited financial statements of the Issuer for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board and where not in conflict with the Financial Accounting Standards Board (“FASB”) pronouncements or accounting principles prescribed by FASB. If the Issuer’s audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the

Annual Report shall contain unaudited financial statements, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.

(2) An update of the following types of information contained in Appendix A to the official statement, dated [____], 2023 and related to the 2023 Series K Bonds:

(i) The table entitled “Power Supply Resources.”

(ii) The table entitled “Projected Requirements and Resources to Meet Load Requirements.”

(iii) The table entitled “Average Class Rates” (to the extent such table relates to rates and revenues of the Issuer).

(iv) The table entitled “Selected Operating Data.”

(v) The table entitled “Unconsolidated Financial Data.”

(vi) The balance in the Decommissioning Trust Fund, the current estimate of decommissioning costs, the decommissioning costs to date, and the annual contribution level to the Decommissioning Trust Fund, all relating to the Rancho Seco Nuclear Power Plant.

(vii) The table entitled “Estimated Capital Requirements.”

(b) Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Issuer or public entities related thereto, which have been submitted to each Repository or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the MSRB. The Issuer shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Listed Events.

(a) Pursuant to the provisions of this Section 5, the Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the 2023 Series K Bonds not later than ten (10) business days after the occurrence of the event:

(1) principal and interest payment delinquencies;

(2) non-payment related defaults, if material;

(3) unscheduled draws on any applicable debt service reserves reflecting financial difficulties;

(4) unscheduled draws on credit enhancement reflecting financial difficulties;

(5) substitution of credit or liquidity providers, or their failure to perform;

(6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701 TEB) or other material notices or determinations with respect to the tax status of the 2023 Series K Bonds or other material events adversely affecting the tax status of the 2023 Series K Bonds;

- (7) modifications to rights of Bondholders, if material;
- (8) bond calls, if material, and tender offers;
- (9) defeasances;
- (10) release, substitution or sale of property securing repayment of the 2023 Series K Bonds, if material;
- (11) rating changes;
- (12) bankruptcy, insolvency, receivership or similar event of the Issuer;
- (13) the consummation of a merger, consolidation, or acquisition involving the Issuer or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
- (14) appointment of a successor or additional trustee or the change of name of the Trustee, if material;
- (15) incurrence of a Financial Obligation of the Issuer, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Issuer, any of which affect Bondholders, if material; and
- (16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Issuer, any of which reflect financial difficulties.

(b) For the purpose of the event identified in Section 5(a)(12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Issuer in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Issuer, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Issuer.

(c) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event, the Issuer shall as soon as possible determine if such event is required to be reported pursuant to this Section 5.

(d) If the Issuer has determined that such event is required to be reported pursuant to this Section 5, the Issuer shall promptly notify the Dissemination Agent in writing. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to subsection (e).

(e) If the Dissemination Agent has been instructed by the Issuer to report the occurrence of a Listed Event, the Dissemination Agent shall file a notice of such occurrence with the MSRB (if the MSRB is not a Repository) and each Repository.

SECTION 6. Termination of Reporting Obligation. The obligations of the Issuer and the Dissemination Agent under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the 2023 Series K Bonds. If such termination occurs prior to the final maturity of the 2023 Series K Bonds, the Issuer shall give notice of such termination in the same manner as for a Listed Event under Section 5.

SECTION 7. Dissemination Agent; Filings.

(a) The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Issuer pursuant to this Disclosure Agreement. If at any time there is not any other designated Dissemination Agent, the Issuer shall be the Dissemination Agent. The initial Dissemination Agent shall be U.S. Bank Trust Company, National Association.

(b) Unless and until one or more different or additional Repositories are designated or authorized by the Securities and Exchange Commission, all filings with a Repository which are required by this Disclosure Agreement shall be filed with the MSRB through EMMA and shall be in an electronic format and accompanied by such identifying information as prescribed by the MSRB in accordance with the Rule.

SECTION 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Issuer and the Dissemination Agent may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, or 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the 2023 Series K Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the 2023 Series K Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (1) is approved by the Holders of 60% of the 2023 Series K Bonds, or (2) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the 2023 Series K Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Issuer shall describe such amendment in its next respective Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles from those described in Section 4(a)(1), on the presentation) of financial information or operating data being presented by the Issuer. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (1) notice of such change shall be given in the same manner as for a Listed Event under Section 5, and (2) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

SECTION 9. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 10. Default. In the event of a failure of the Issuer or the Trustee to comply with any provision of this Disclosure Agreement, the Trustee shall, at the request of any Participating Underwriters or the Holders of at least 25% aggregate principal amount of Outstanding Bonds and upon being indemnified to its satisfaction from and against any costs, liability, expenses and fees of the Trustee, including, without limitation fees and expenses of its attorneys, or any Holder or Beneficial Owner of the 2023 Series K Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer or the Dissemination Agent, as the case may be, to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Resolution, and the sole remedy under this Disclosure Agreement in the event of any failure of the Issuer or the Dissemination Agent to comply with this Disclosure Agreement shall be an action to compel performance.

SECTION 11. Duties, Immunities and Liabilities of Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement, and the Issuer agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys' fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's negligence or willful misconduct. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement and no implied duties for obligation shall be read into this Disclosure Agreement against the Dissemination Agent. The Dissemination Agent has no power to enforce nonperformance on the part of the Issuer. The Dissemination Agent shall be paid compensation by the Issuer for its services provided hereunder in accordance with its schedule of fees provided to the Issuer and all expenses, legal fees and costs of the Dissemination Agent made or incurred by the Dissemination Agent in the performance of its duties hereunder. The obligations of the Issuer under this Section shall survive resignation or removal of the Dissemination Agent and payment of the 2023 Series K Bonds.

SECTION 12. Notices. Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:

To the Issuer:	Sacramento Municipal Utility District 6201 S Street, MS B405 Sacramento, California 95817 Attention: Treasurer Telephone: (916) 732-6509 Fax: (916) 732-5835
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To the Dissemination Agent: U.S. Bank Trust Company, National Association
Global Corporate Trust
One California Street, Suite 1000
San Francisco, California 94111
Telephone: (415) 677-3699
Fax: (415) 677-3769

To the Trustee: U.S. Bank Trust Company, National Association
Global Corporate Trust
One California Street, Suite 1000
San Francisco, California 94111
Telephone: (415) 677-3699
Fax: (415) 677-3769

The Issuer, the Dissemination Agent and the Trustee may, by giving written notice hereunder to the other person listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent. Unless specifically otherwise required by the context of this Disclosure Agreement, a party may give notice by any form of electronic transmission capable of producing a written record. Each such party shall file with the Trustee and Dissemination Agent information appropriate to receiving such form of electronic transmission.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Issuer, the Dissemination Agent, the Participating Underwriters and Holders and Beneficial Owners from time to time of the 2023 Series K Bonds, and shall create no rights in any other person or entity.

SECTION 14. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Dated: __, 2023.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
Treasurer

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
as Dissemination Agent

By _____
Authorized Officer

ACKNOWLEDGED:

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Trustee

By: _____
Authorized Officer

EXHIBIT A

NOTICE TO REPOSITORIES OF FAILURE TO FILE ANNUAL REPORT

Name of Issuer: Sacramento Municipal Utility District
Name of Bond Issue: Electric Revenue Refunding Bonds, 2023 Series K
Name of Borrower: Sacramento Municipal Utility District
Date of Issuance: __, 2023

NOTICE IS HEREBY GIVEN that the Sacramento Municipal Utility District (the “Issuer”) has not provided an Annual Report with respect to the above-named Bonds as required by Section 143.11 of Resolution No. 23-05-[] adopted May 18, 2023, by the Issuer. [The Issuer anticipates that the Annual Report will be filed by _____.]

Dated: _____

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
on behalf of Sacramento Municipal Utility District

cc: Sacramento Municipal Utility District

NEW ISSUE- FULL BOOK-ENTRY

Ratings: See "RATINGS" herein

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD, based upon an analysis of existing laws, regulations, rulings and court decisions and, assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2023C Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. In the further opinion of Bond Counsel, interest on the 2023C Subordinated Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. Bond Counsel observes that, for tax years beginning after December 31, 2022, interest on the 2023C Subordinated Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2023C Subordinated Bonds. See "TAX MATTERS."



\$132,020,000 Subordinated Electric Revenue Refunding Bonds
2023 Series C
CUSIP: [][†]

Dated: Date of Delivery**Price: 100%****Due: [Maturity Date]**

The Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the "2023C Subordinated Bonds") will be issued pursuant to Resolution No. 85-11-1 of the Sacramento Municipal Utility District ("SMUD"), adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted June 21, 2001, as supplemented and amended, and will be payable from the Net Subordinated Revenues of the Electric System of SMUD, as described herein. The 2023C Subordinated Bonds are being issued to [(i) refund certain of SMUD's outstanding Senior Bonds (as defined herein) and (ii) pay certain costs associated with the issuance of the 2023C Subordinated Bonds]. See "PLAN OF FINANCE."

The 2023C Subordinated Bonds will initially be issued in the Daily Mode and will bear interest initially at a Daily Rate determined by the Underwriter and thereafter will bear interest at the Daily Rates established by the Remarketing Agent for the 2023C Subordinated Bonds. Interest on the 2023C Subordinate Bonds bearing interest in the Daily or Weekly Mode will be computed on the basis of 365/366-day year and actual days elapsed. While in the Daily or Weekly Mode, interest on the 2023C Subordinated Bonds shall be payable on the first Business Day of each month, commencing on [____], 2023. The 2023C Subordinated Bonds may, under certain circumstances, be converted from the Daily Mode to a Weekly Mode, Flexible Mode, Index Mode, Direct Purchase Index Mode, Term Rate Mode or Fixed Rate Mode. The 2023C Subordinated Bonds are subject to mandatory tender in the event of any such conversion (except for conversions between the Daily Mode and the Weekly Mode). See "THE 2023C SUBORDINATED BONDS – Conversion Between Modes" and "– Mandatory Purchase on the Mandatory Purchase Date". *This Official Statement provides information as of its date concerning the 2023C Subordinated Bonds only while bearing interest in the Daily Mode or the Weekly Mode. Owners and prospective purchasers of the 2023C Subordinated Bonds should not rely on this Official Statement for information concerning the 2023C Subordinated Bonds in connection with any conversion of the 2023C Subordinated Bonds to an Interest Rate Mode other than the Daily Mode or the Weekly Mode but should look solely to the offering document to be used in connection with any such conversion.*

The 2023C Subordinated Bonds are also subject to optional and mandatory tender, and optional and mandatory redemption prior to maturity as set forth herein. See "THE 2023C SUBORDINATED BONDS – Optional Tender," "– Mandatory Purchase on the Mandatory Purchase Date," "– Optional Redemption" and "– Mandatory Sinking Fund Redemption" herein.

The 2023C Subordinated Bonds in the Weekly Mode are being issued in denominations of \$100,000 and any integral multiple of \$5,000 in excess thereof as fully registered bonds and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). DTC will act as securities depository for the 2023C Subordinated Bonds, and individual purchases of the 2023C Subordinated Bonds will be made in book-entry form only. Principal or Redemption Price or Purchase Price of, and interest on the 2023C Subordinated Bonds will be payable by U.S. Bank Trust Company, National Association, as trustee (the "Trustee") to DTC, which is obligated in turn to remit such principal or Redemption Price or Purchase Price, and interest to its DTC Participants for subsequent disbursement to the beneficial owners of the 2023C Subordinated Bonds, as described herein.

In order to provide for the payment of the Purchase Price of the 2023C Subordinated Bonds that are tendered for purchase and not remarketed, SMUD will enter into a standby bond purchase agreement (the “Initial Liquidity Facility”) with TD Bank, N.A. (the “Initial Liquidity Provider”).

[TD Bank, N.A. logo]

Pursuant to the terms of the Initial Liquidity Facility, with respect to 2023C Subordinated Bonds that are tendered for purchase and not remarketed, the Initial Liquidity Provider will be obligated to purchase the 2023C Subordinated Bonds, subject to the occurrence of certain suspension and termination events, as more fully described herein. Unless otherwise terminated or extended pursuant to its terms, the Initial Liquidity Facility will expire on [].

Under certain circumstances, the obligation of the Initial Liquidity Provider to purchase the 2023C Subordinated Bonds optionally tendered for purchase by the owners thereof or subject to mandatory tender for purchase may be terminated or suspended without a purchase by the Initial Liquidity Provider. In such event, sufficient funds may not be available to purchase 2023C Subordinated Bonds optionally tendered for purchase by the owners thereof or subject to mandatory tender for purchase. In addition, the Initial Liquidity Facility does not provide security for the payment of principal, or Redemption Price of, on the 2023C Subordinated Bonds and only provides for the purchase of tendered 2023C Subordinated Bonds. If, for any reason, sufficient funds are not available under the Initial Liquidity Facility to pay the Purchase Price of 2023C Subordinated Bonds tendered for purchase and not remarketed, SMUD is not obligated to pay the Purchase Price of such 2023C Subordinated Bonds and failure to pay the Purchase Price of such 2023C Subordinated Bonds is not an Event of Default.

The principal of and interest on the 2023C Subordinated Bonds, together with the debt service on other Subordinated Bonds and Parity Subordinated Debt (as defined herein), are payable exclusively from and secured by a pledge of the Net Subordinated Revenues of the Electric System of SMUD. Neither the credit nor the taxing power of SMUD or the State of California is pledged to the payment of the 2023C Subordinated Bonds. Payment of the principal of and interest on the Subordinated Bonds, including the 2023C Subordinated Bonds, is subordinated to the payment of principal and interest on SMUD’s Electric Revenue Bonds and other Parity Bonds (as defined herein).

The information presented on this cover page is for general reference only and is qualified in its entirety by reference to the entire Official Statement and the documents summarized and described herein.

The 2023C Subordinated Bonds are offered when, as and if issued and received by the Underwriter, subject to the approval of the validity of the 2023C Subordinated Bonds and certain other legal matters by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. Certain legal matters will be passed on for the Underwriter by its counsel, Nixon Peabody LLP, San Francisco, California. Certain legal matters relating to the Initial Liquidity Facility will be passed upon for the Initial Liquidity Provider by its counsel, Chapman and Cutler LLP. It is expected that the 2023C Subordinated Bonds will be available for delivery through the facilities of DTC on or about _____, 2023.

Barclays
(as Underwriter and Remarketing Agent)

_____, 2023

†CUSIP® is a registered trademark of the American Bankers Association. CUSIP® data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP® numbers have been assigned by an independent company not affiliated with SMUD or the Underwriter and are included solely for the convenience of the registered owners of the 2023C Subordinated Bonds. Neither SMUD nor the Underwriter are responsible for the selection or uses of these CUSIP® numbers, and no representation is made as to their correctness on the 2023C Subordinated Bonds or as included herein. The CUSIP® number for a specific maturity is subject to being changed after the execution and delivery of the 2023C Subordinated Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of the 2023C Subordinated Bonds.

SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS

Heidi Sanborn, President
Rosanna Herber, Vice President
Brandon Rose
Nancy Bui-Thompson
Gregg Fishman
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Frankie McDermott, Chief Operating Officer
Jennifer Davidson, Chief Financial Officer
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Lora Anguay, Chief Zero Carbon Officer
Farres Everly, Director, Communications, Marketing and Community Relations
Russell Mills, Treasurer
Lisa Limcaco, Controller

SPECIAL SERVICES

ORRICK, HERRINGTON & SUTCLIFFE LLP
Bond Counsel

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION,
Trustee and Paying Agent

BAKER TILLY VIRCHOW KRAUSE, LLP, Madison, Wisconsin
Independent Accountants

PFM FINANCIAL ADVISORS LLC, Philadelphia, Pennsylvania
Municipal Advisor

EVERCREST ADVISORS, LLC
Swap Advisor

□
Verification Agent

No dealer, broker, salesperson or other person has been authorized by SMUD or the Underwriter to give any information or to make any representations with respect to the 2023C Subordinated Bonds other than those contained in this Official Statement and, if given or made, such information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell nor the solicitation of an offer to buy, nor shall there be any sale of the 2023C Subordinated Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been obtained from SMUD and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation of, the Underwriter. The information and expressions of opinion stated herein are subject to change without notice. The delivery of this Official Statement shall not, under any circumstances, create any implication that there has been no change in the affairs of SMUD since the date hereof. The Underwriter has provided the following sentence for inclusion in this Official Statement: The Underwriter has reviewed the information in this Official Statement in accordance with and as part of their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriter does not guarantee the accuracy or completeness of such information.

The 2023C Subordinated Bonds have not been registered under the Securities Act of 1933, as amended, in reliance upon an exemption from the registration requirements contained in such Act. The 2023C Subordinated Bonds have not been registered or qualified under the securities laws of any state.

IN CONNECTION WITH THE OFFERING OF THE 2023C SUBORDINATED BONDS, THE UNDERWRITER MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICES OF SUCH BONDS AT LEVELS ABOVE THOSE THAT MIGHT OTHERWISE PREVAIL ON THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE UNDERWRITER MAY OFFER AND SELL THE 2023C SUBORDINATED BONDS TO CERTAIN DEALERS AND OTHERS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES SET FORTH ON THE COVER PAGE HEREOF AND SAID PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITER.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT

Certain statements included or incorporated by reference in this Official Statement constitute “forward-looking statements.” Such statements generally are identifiable by the terminology used, such as “plan,” “expect,” “estimate,” “budget” or other similar words.

The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. SMUD does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations or events, conditions or circumstances on which such statements are based occur.

This Official Statement, including any supplement or amendment hereto, is intended to be deposited with the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access website. SMUD maintains a website. However, the information presented therein is not part of this Official Statement and should not be relied upon in making investment decisions with respect to the 2023C Subordinated Bonds. The references to internet websites in this Official Statement are shown for reference and convenience only; unless explicitly stated to the contrary, the information contained within the websites is not incorporated herein by reference and does not constitute part of this Official Statement.

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OFFICIAL STATEMENT

Relating to

SACRAMENTO MUNICIPAL UTILITY DISTRICT

\$132,020,000

**Subordinated Electric Revenue Refunding Bonds
2023 Series C**

INTRODUCTION

This Official Statement, including the cover page and Appendices attached hereto, describes the Sacramento Municipal Utility District (“SMUD”), a political subdivision of the State of California (the “State”), and its \$132,020,000 Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “2023C Subordinated Bonds”), in connection with the sale by SMUD of the 2023C Subordinated Bonds. The 2023C Subordinated Bonds are being issued to (i) refund SMUD’s Electric Revenue Refunding Bonds, 2013 Series A (the “2013A Refunded Senior Bonds”) and (ii) pay certain costs associated with the issuance of the 2023C Subordinated Bonds. See “PLAN OF FINANCE.”

The 2023C Subordinated Bonds are being issued pursuant to Resolution No. 85-11-1 of SMUD, adopted November 7, 1985, as amended and restated by Resolution No. 01-06-10 (the “Subordinate Master Resolution”), as supplemented and amended, and pursuant to applicable California law, including the Municipal Utility District Act (Public Utilities Code Sections 12850 to 12860) (the “Act”), the Revenue Bond Law of 1941 (Government Code Section 54300 *et seq.*) and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (Government Code Section 53580 *et seq.*). The issuance of the 2023C Subordinated Bonds was authorized on May 18, 2023, by a resolution of the Board of Directors of SMUD (the “2023 Supplemental Resolution”). The Subordinate Master Resolution and all supplemental resolutions, including the 2023 Supplemental Resolution, are collectively referred to herein as the Subordinate Resolution. See APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION.”

U.S. Bank Trust Company, National Association serves as trustee and paying agent under the Subordinate Resolution (the “Trustee”).

The 2023C Subordinated Bonds and other bonds issued on a parity therewith pursuant to the Subordinate Resolution are collectively referred to herein as the “Subordinated Bonds.” As of May 1, 2023, Subordinated Bonds in the aggregate principal amount of \$200,000,000 were outstanding under the Subordinate Resolution.

The payment of the principal of and interest on the Subordinated Bonds, including the 2023C Subordinated Bonds, is subordinate to the payment of the principal of and interest on SMUD’s Electric Revenue Bonds (the “Senior Bonds”) and other Parity Bonds. As of May 1, 2023, Senior Bonds in the aggregate principal amount of \$1,841,715,000 were outstanding. Senior Bonds are issued pursuant to Resolution No. 6649 (the “Senior Bond Resolution”) adopted in 1971, as amended and supplemented. See APPENDIX E – “SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION.”

The issuance of the 2023C Subordinated Bonds and the refunding of the 2013A Refunded Senior Bonds is a component of a plan of finance (the “Plan of Finance”) that includes the issuance of SMUD’s Electric Revenue Refunding Bonds, 2023 Series K (the “2023K Senior Bonds”) to refund SMUD’s

Electric Revenue Refunding Bonds, 2013 Series B (the “2013B Refunded Senior Bonds”), the issuance of SMUD’s Subordinated Electric Revenue Bonds, 2023 Series D and 2023 Series E (the “2023D Subordinated Bonds” and “2023E Subordinated Bonds,” respectively), to finance and refinance certain improvements and additions to SMUD’s Electric System, including through the refunding of SMUD’s commercial paper notes, and the issuance of SMUD’s Subordinated Electric Revenue Refunding Bonds, 2023 Series F (the “2023F Subordinated Bonds”) to refund SMUD’s Subordinated Electric Revenue Bonds, 2019 Series A (the “2019A Refunded Subordinated Bonds”). The issuance of the 2023C Subordinated Bonds to refund the 2013A Refunded Senior Bonds is not contingent upon the implementation of the other components of the Plan of Finance, and SMUD is not obligated to implement any of the components of the Plan of Finance. Upon the issuance of the 2023C Subordinated Bonds and the refunding of the 2013A Refunded Senior Bonds, Senior Bonds in the aggregate principal amount of \$[] and Subordinated Bonds in the aggregate principal amount of \$[] will be outstanding. If the Plan of Finance is implemented in whole, upon completion of the Plan of Finance, Senior Bonds in the aggregate principal amount of approximately \$[] and Subordinated Bonds in the aggregate principal amount of approximately \$[] are expected to be outstanding. See “PLAN OF FINANCE.”

The 2023C Subordinated Bonds will be subject to optional and mandatory tender for purchase at a purchase price equal to the principal thereof plus accrued interest thereon, if any, to but excluding the date of purchase (the “Purchase Price”), as provided in the Supplemental Resolution. In order to provide for the payment of the Purchase Price of the 2023C Subordinated Bonds that are tendered for purchase and not remarketed, SMUD will enter into a standby bond purchase agreement (the “Initial Liquidity Facility”) with TD Bank, N.A. (the “Initial Liquidity Provider”). Pursuant to the terms of the Initial Liquidity Facility, with respect to 2023C Subordinated Bonds that are tendered for purchase and not remarketed, the Initial Liquidity Provider will be obligated to purchase the 2023C Subordinated Bonds, subject to the occurrence of certain suspension and termination events, as more fully described herein. Unless otherwise terminated or extended pursuant to its terms, the Initial Liquidity Facility will expire on []. The Initial Liquidity Facility may be replaced by an Alternate Liquidity Facility, as described herein. See “INITIAL LIQUIDITY FACILITY” and “THE 2023C SUBORDINATED BONDS – Alternate Credit Enhancement and Alternate Liquidity Facility.”

SMUD also issues commercial paper notes (the “Notes”) from time to time. As of May 1, 2023, Notes in the principal amount of \$200,000,000 were outstanding. Currently, Notes in the aggregate principal amount of \$300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD’s obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds (including the 2023C Subordinated Bonds). Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February and August of 2025. SMUD intends to pay all of the outstanding principal amount of the Notes with the proceeds of the 2023D Subordinated Bonds and the 2023E Subordinated Bonds. See “PLAN OF FINANCE.”

SMUD has also previously issued its taxable and tax-exempt revolving notes pursuant to a revolving credit agreement with a commercial bank (collectively, the “Revolving Credit Facility”). As of May 1, 2023, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to \$100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD’s payment obligations under the Revolving Credit Facility are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of,

premium if any, and interest on the Senior Bonds and the Subordinated Bonds (including the 2023C Subordinated Bonds). The current term of the Revolving Credit Facility expires in February 2026.

SMUD is responsible for the acquisition, generation, transmission and distribution of electric power to its service area, which includes most of Sacramento County and small portions of Placer and Yolo counties. For the year ended December 31, 2022, SMUD served a population of approximately 1.5 million with a total annual retail load of approximately 10,622 million kilowatt hours (“kWh”). SMUD owns and operates an electric system which, as of March 31, 2023, included generating facilities owned and operated by SMUD with an aggregate generating capacity of approximately 783 megawatts (“MW”), local gas-fired plants owned and operated by a joint powers authority and managed by SMUD with an aggregate generating capacity of approximately 1,081 MW, over which SMUD has exclusive control of dispatch, and purchased power with an aggregate generating capacity of approximately 1,314 MW and transmission and distribution facilities. SMUD’s power requirements exceed its generating capacity and thus SMUD has agreements with others (including the Local Gas-Fired Plants as defined in APPENDIX A) for the purchase of a portion of its power requirements. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – POWER SUPPLY AND TRANSMISSION – Power Supply Resources.” Continuing development of SMUD’s business strategy in response to changing environmental and regulatory requirements has had, and is expected to continue to have, a major effect on SMUD’s power supply planning. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – BUSINESS STRATEGY.”

Pursuant to a Continuing Disclosure Agreement, dated the date of issuance of the 2023C Subordinated Bonds (the “Continuing Disclosure Agreement”) between SMUD and the Trustee, SMUD will covenant for the benefit for the holders of the 2023C Subordinated Bonds and owners of beneficial interest in the 2023C Subordinated Bonds to provide certain financial information and operating data and to provide certain notices. See “CONTINUING DISCLOSURE UNDERTAKING” and APPENDIX G – “FORM OF CONTINUING DISCLOSURE AGREEMENT.”

The information presented in this Introduction is qualified in its entirety by reference to this entire Official Statement and the documents summarized or described herein. This Official Statement, including the Appendices, summarizes the terms of the 2023C Subordinated Bonds, the Subordinate Resolution and certain agreements, contracts and other arrangements, some of which currently exist and others of which may exist in the future. The summaries of and references to all documents, statutes, regulations and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary and reference is qualified in its entirety by reference to each such document, statute, regulation or instrument.

Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION – Certain Definitions” or in the Subordinate Resolution.

PLAN OF FINANCE

The proceeds of the 2023C Subordinated Bonds will be used to (i) refund the 2013A Refunded Senior Bonds, currently outstanding in the principal amount of \$132,020,000, and (ii) pay certain costs associated with the issuance of the 2023C Subordinated Bonds. In June 2020, SMUD had entered into a forward starting interest rate swap agreement to hedge potential interest rate exposure relating to the future refunding of the 2013A Refunded Senior Bonds (the “Financial Products Agreement”). The Financial Products Agreement will become effective on July 12, 2023. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Interest Rate Swap Agreements*.” The issuance of the 2023C Subordinated Bonds to refund the 2013A Refunded

Senior Bonds is a component of the Plan of Finance, as further described below. The issuance of the 2023C Subordinated Bonds to refund the 2013A Refunded Senior Bonds is not contingent upon the implementation of the other components of the Plan of Finance, and SMUD is not obligated to implement all of the components of the Plan of Finance.

Refunding of 2013A Refunded Senior Bonds

A portion of the proceeds of the 2023C Subordinated Bonds, together with other available funds, will be deposited in trust in an escrow fund (the “2013A Escrow Fund”) established under an escrow agreement between SMUD and the Trustee, in an amount sufficient to pay the interest on the 2013A Refunded Bonds due on August 15, 2023 (the “2013A Redemption Date”) and to redeem the 2013A Refunded Bonds on the 2013A Redemption Date. The moneys so deposited may be invested in direct obligations of the United States of America (the “Federal Securities”). Upon deposit, all liability of SMUD with respect to the 2013A Refunded Bonds (except for the obligation of SMUD to pay the interest on and redemption price of the 2013A Refunded Bonds from moneys on deposit in the 2013A Escrow Fund) will cease. The holders of the 2013A Refunded Bonds will be entitled to payment from SMUD solely from moneys or Federal Securities on deposit in the 2013A Escrow Fund, and the 2013A Refunded Bonds will no longer be outstanding under the Senior Bond Resolution. The moneys or Federal Securities in the 2013A Escrow Fund will not secure the 2023C Subordinated Bonds and will not be available to pay the principal of or interest on the 2023C Subordinated Bonds.

Issuance of 2023K Senior Bonds and Refunding of 2013B Refunded Senior Bonds

[Concurrently with the issuance of the 2023C Subordinated Bonds,] SMUD expects to issue approximately \$[] in principal amount of the 2023K Senior Bonds. The 2023K Senior Bonds are expected to be issued as fixed rate bonds with a final maturity of 2033. The proceeds of the 2023K Senior Bonds are expected to be used to refund the 2013B Refunded Senior Bonds. In connection with the refunding of the 2013B Refunded Senior Bonds, SMUD expects to terminate a forward starting interest rate swap agreement that was executed in June 2020 to hedge potential interest rate exposure relating to the future refunding of the 2013B Refunded Senior Bonds. SMUD expects that it will receive a termination payment for the termination of the interest rate swap agreement. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Interest Rate Swap Agreements.*”

A portion of the proceeds of the 2023K Senior Bonds, together with other available funds, will be deposited in trust in an escrow fund (the “2013B Escrow Fund”) established under an escrow agreement between SMUD and the Trustee. The moneys so deposited will be invested in direct obligations of the United States of America, the interest on and principal of which will be sufficient to pay the interest on the 2013B Refunded Bonds due on August 15, 2023 (the “2013B Redemption Date”) and to redeem the 2013B Refunded Bonds on the 2013B Redemption Date. The securities and moneys in the 2013B Escrow Fund will not secure the 2023C Subordinated Bonds and will not be available to pay the principal of or interest on the 2023C Subordinated Bonds.

Issuance of 2023D Subordinated Bonds and 2023E Subordinated Bonds

[Shortly after the issuance of the 2023C Subordinated Bonds], SMUD expects to issue the 2023D Subordinated Bonds and the 2023E Subordinated Bonds in the approximate principal amounts of \$[] and \$[], respectively. The proceeds of the 2023D Subordinated Bonds and the 2023E Subordinated Bonds are expected to be used to finance and refinance certain improvements and additions to SMUD’s Electric System, including through the refunding of SMUD’s commercial paper notes in the outstanding principal amount of \$200,000,000. The 2023D Subordinated Bonds and the 2023E Subordinated Bonds

are each expected to be issued in a term rate mode, bearing fixed rates during the initial term rate periods of [] years and [] years, respectively.

Issuance of 2023F Subordinated Bonds

[Shortly after the issuance of the 2023C Subordinated Bonds], SMUD expects to issue the 2023F Subordinated Bonds in the approximate principal amount of \$[] to refund the outstanding 2019A Refunded Subordinated Bonds. The 2023F Subordinated Bonds are expected to be issued in a term rate mode, bearing fixed rates during an initial term rate period of [five] years.

ESTIMATED SOURCES AND USES OF FUNDS

The estimated sources and uses of funds with respect to the 2023C Subordinated Bonds are as follows:

Sources of Funds:	
Principal Amount of 2023C Subordinated Bonds	\$
SMUD Contribution	
Total Sources of Funds	\$
Uses of Funds:	
Refunding of 2013A Refunded Senior Bonds	\$
Costs of Issuance (including Underwriter’s Discount)	
Total Uses of Funds	\$

THE 2023C SUBORDINATED BONDS

The following is a summary of certain provisions of the 2023C Subordinated Bonds. Reference is made to the 2023C Subordinated Bonds for the complete text thereof and to the Subordinate Resolution for a more detailed description of such provisions. The discussion herein is qualified by such reference. *This Official Statement provides information as of its date with respect to 2023C Subordinated Bonds bearing interest in the Daily Mode or the Weekly Mode. Owners and prospective purchasers of the 2023C Subordinated Bonds should not rely on this Official Statement for information concerning the 2023C Subordinated Bonds in connection with any conversion of the 2023C Subordinated Bonds to a Mode other than the Daily Mode or the Weekly Mode, but should look solely to the offering document to be used in connection with any such conversion.*

General

The 2023C Subordinated Bonds are being issued in the principal amount shown on the cover of this Official Statement. The 2023C Subordinated Bonds will be issued under a book-entry only system, and will be registered in the name of Cede & Co., as nominee for The Depository Trust Company (“DTC”), New York, New York, which will act as bond depository for the 2023C Subordinated Bonds. Principal or Redemption Price of, and interest on the 2023C Subordinated Bonds or the Purchase Price thereof are payable by the Trustee to DTC, which is obligated in turn to remit such principal or Redemption Price, and interest or Purchase Price to its DTC Participants for subsequent disbursement to the beneficial owners of the 2023C Subordinated Bonds. See APPENDIX C – “BOOK-ENTRY SYSTEM”.

The 2023C Subordinated Bonds will be dated the date of initial delivery and will mature on the date on the cover page of this Official Statement. The 2023C Subordinated Bonds will initially be issued in the Daily Mode and only as fully registered 2023C Subordinated Bonds in the denominations of

\$100,000 and any integral multiple of \$5,000 in excess thereof (the “Authorized Denominations”) while in the Daily Mode.

The 2023C Subordinated Bonds will initially bear interest at an initial rate set by the Underwriter prior to delivery of the 2023C Subordinated Bonds. Thereafter, the 2023C Subordinated Bonds will bear interest at rates established by the Remarketing Agent until maturity, redemption or conversion, as described herein.

At the option of SMUD and upon certain conditions provided in the Subordinate Resolution, the 2023C Subordinated Bonds may be converted to the Weekly Mode, Flexible Mode, Term Rate Mode, Index Mode, Direct Purchase Index Mode, or Fixed Rate Mode. See “Conversion Between Modes” herein. While the 2023C Subordinated Bonds may, under certain circumstances, be converted to a Weekly Mode, Flexible Mode, Term Rate Mode, Index Mode, Direct Purchase Index Mode or Fixed Rate Mode, this Official Statement describes the 2023C Subordinated Bonds only during the period in which they bear interest in the Daily Mode or the Weekly Mode. The 2023C Subordinated Bonds are subject to mandatory tender in the event of any such conversion related thereto (except for conversions between the Daily Mode and the Weekly Mode). See “Conversion Between Modes” and “Mandatory Purchase on the Mandatory Purchase Date” herein.

While in the Daily Mode or the Weekly Mode, interest on the 2023C Subordinated Bonds shall be payable on a monthly basis on the first Business Day of each month (an “Interest Payment Date”) commencing on [], 2023, any Mandatory Purchase Date, and on the Maturity Date of the 2023C Subordinated Bonds. Interest on the 2023C Subordinated Bonds shall be computed on the basis of a 365 or 366-day year, for the actual number of days elapsed. The Record Date for the payment of interest while a 2023C Subordinated Bond is in the Daily Mode or the Weekly Mode is the last Business Day before an Interest Payment Date.

During the Daily Mode, Remarketing Agent shall establish the Daily Rate by 10:00 a.m., New York City time, on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. During the Weekly Mode, Remarketing Agent shall establish the Weekly Rate by 4:00 p.m., New York City time, on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Weekly Rate Period is the period commencing on Thursday of each week to and including Wednesday of the following week, except (i) the first Weekly Rate Period which shall be from the Conversion on which the Interest Rate Mode for the 2023C Subordinated Bonds is changed to a Weekly Mode to and including the Wednesday of the following week, and (ii) the last Weekly Rate Period which shall end on the day preceding the earliest to occur of the Conversion Date on which the Interest Rate Mode for the 2023C Subordinated Bonds is changed from the Weekly Mode to a different Interest Rate Mode, the Maturity Date or the Mandatory Purchase Date for such 2023C Subordinated Bond.

The Rate Determination Date for the 2023C Subordinated Bonds in the Daily Mode will be each Business Day commencing with the first day (which must be a Business Day) the 2023C Subordinated Bonds becomes subject to the Daily Mode. The Rate Determination Date for the 2023C Subordinated Bonds in the Weekly Mode will be (i) each Wednesday or, if Wednesday is not a Business Day, then the Business Day next succeeding such Wednesday, and (ii) not later than the Business Day preceding a Conversion Date, the date upon which an Alternate Credit Enhancement or Alternate Liquidity facility is scheduled to be substituted for a Credit Enhancement or Liquidity then in effect (a “Substitution Date”) or a Mandatory Purchase Date that is any Business Day specified by SMUD with the consent of a Liquidity Provider, if any, not less than 20 days after the Trustee’s receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023C Subordinated Bonds.

The Daily Rate and the Weekly Rate for each Interest Period will be the rate of interest per annum determined by Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2023C Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during then current Interest Accrual Period. In making any such determination, the Remarketing Agent will not take into account the per annum rate of interest that would be applicable to 2023C Subordinated Bonds purchased by the Liquidity Provider with funds drawn on or advanced under the Liquidity Facility (“Liquidity Provider Bonds”) pursuant to the terms of the applicable Liquidity Facility. No 2023C Subordinated Bonds other than Liquidity Provider Bonds may bear interest at an interest rate higher than twelve percent (12%) per year.

If the Remarketing Agent fails or is unable to make such determination, the method by which the Remarketing Agent determines the interest rate is held to be unenforceable by a court of law of competent jurisdiction, or the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement, then the rate to take effect on the first day of any Interest Period shall be the Alternate Rate. “Alternate Rate” is defined in the Subordinate Resolution to mean a rate per annum equal to 110% of (a) the SIFMA Municipal Swap Index of Municipal Market Data most recently available as of the date of determination, or (b) if such index is no longer available, or if the SIFMA Municipal Swap Index is no longer published, the S&P Municipal Bond 7 Day High Grade Index, or if neither the SIFMA Municipal Swap Index nor the S&P Municipal Bond 7 Day High Grade Index is published, the index determined to equal the prevailing rate determined by the Remarketing Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Remarketing Agent to be comparable under the circumstances to the criteria used by the Securities Industry and Financial Markets Association to determine the SIFMA Municipal Swap Index just prior to when the Securities and Financial Markets Association stopped publishing the SIFMA Municipal Swap Index.

Subject to the provisions discussed in APPENDIX C – “BOOK-ENTRY SYSTEM,” principal or Redemption Price will be payable upon surrender of the 2023C Subordinated Bonds at the principal corporate trust office of the Trustee. Interest on the 2023C Subordinated Bonds will be paid by wire transfer within the continental United States of immediately available funds from the Trustee to the registered owner, determined as of the close of business on the applicable Record Date, at its address as shown on the registration books maintained by the Trustee.

Conversion Between Modes

While the 2023C Subordinated Bonds are in the Daily Mode or Weekly Mode, conversions to any other Interest Rate Mode may take place on any Business Day, upon not less than 10 days’ prior written notice from the Trustee to the registered owners of such 2023C Subordinated Bonds.

Upon such conversion, the 2023C Subordinated Bonds will be subject to mandatory purchase on the Mandatory Purchase Date as described herein under “Mandatory Purchase on the Mandatory Purchase Date.” Each conversion of the 2023C Subordinated Bonds from one Interest Rate Mode to another Interest Rate Mode shall be subject to the conditions set forth in the Subordinate Resolution, including delivery of a Favorable Opinion of Bond Counsel. In addition, SMUD may rescind any election to convert to another Interest Rate Mode up to 10:00 a.m., New York City time, on the Business Day preceding the proposed conversion date. In the event that the conditions for a proposed conversion to a new Interest Rate Mode are not met or SMUD rescinds the direction to convert, (i) such new Interest Rate Mode shall not take effect on the proposed conversion date, notwithstanding any prior notice to the registered owners of such conversion, (ii) the 2023C Subordinated Bonds shall remain in the prior Interest Rate Mode, and (iii) the 2023C Subordinated Bonds shall be subject to mandatory purchase on the Mandatory Purchase Date as described in the Subordinate Resolution if notice has been sent to the

registered owners stating that the 2023C Subordinated Bonds would be subject to mandatory purchase on such date. In no event shall the failure of the 2023C Subordinated Bonds to be converted to another Interest Rate Mode be deemed to be a default or an Event of Default.

Optional Tender

While the 2023C Subordinated Bonds are in the Daily Mode or Weekly Mode, the Beneficial Owners of 2023C Subordinated Bonds may elect to have their 2023C Subordinated Bonds (or portions of those 2023C Subordinated Bonds, provided that no 2023C Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price.

“Purchase Price” means an amount equal to the principal amount of any 2023C Subordinated Bonds purchased on the any Purchase Date, plus accrued interest to but excluding the Purchase Date ; provided, however, that if the Purchase Date for any 2023C Subordinated Bond is an Interest Payment Date for such 2023C Subordinated Bond, in which case the Purchase Price thereof shall be the principal amount thereof, and interest on such 2023C Subordinated Bond shall be paid to the Holder of such 2023C Subordinated Bond in the normal course.

In order to exercise the right to tender, the Beneficial Owners must deliver to the Trustee by Electronic Means or in writing with respect to a 2023C Subordinated Bond a notice that states (i) the principal amount of such 2023C Subordinated Bond to be purchased pursuant to the Subordinate Resolution, (ii) the Purchase Date on which such 2023C Subordinated Bond is to be purchased, (iii) applicable payment instructions with respect to the 2023C Subordinated Bonds being tendered for purchase and (iv) an irrevocable demand for such purchase (a “Tender Notice”). If the 2023C Subordinated Bonds is in the Daily Mode, the 2023C Subordinated Bonds will be purchased on any Business Day if a Tender Notice is delivered to the Trustee not later than 11:00 a.m., New York City time, on any Business Day. If the 2023C Subordinated Bonds is in the Weekly Mode, the 2023C Subordinated Bonds will be purchased on the Business Day specified in such Tender Notice, if a Tender Notice is delivered to the Trustee by 5:00 p.m., New York City time, on a Business Day not less than seven days prior to the Purchase Date.

Notice of tender of a Series of 2023C Subordinated Bonds is irrevocable. If the Beneficial Owner of a 2023C Subordinated Bond has elected to require purchase as provided above, the Beneficial Owner shall be deemed, by such election, to have agreed irrevocably to sell such 2023C Subordinated Bond to any purchaser, on the date fixed for purchase at the Purchase Price. The Purchase Price of such 2023C Subordinated Bond shall be paid to the registered owner by the Trustee on the Purchase Date or any subsequent Business Day on which such 2023C Subordinated Bond is delivered to the Trustee by 12:00 noon, New York City time. From and after the Purchase Date, no further interest on such 2023C Subordinated Bond shall be payable to the Beneficial Owner who gave notice of tender for purchase, provided that there are sufficient funds available on the Purchase Date to pay the Purchase Price.

Notwithstanding the foregoing provisions, all tenders of a Series of 2023C Subordinated Bonds for purchase during any period in which the 2023C Subordinated Bonds is registered in the name of any Securities Depository shall be subject to the terms and conditions set forth in the Representations Letter between SMUD and the Securities Depository and to any regulations promulgated by the Securities Depository. During any period that the 2023C Subordinated Bonds are registered in the name of DTC or its nominee, the tender option rights of Holders of such 2023C Subordinated Bonds may be exercised only by a Direct Participant of DTC acting, directly or indirectly, on behalf of a Beneficial Owner of such 2023C Subordinated Bonds by giving notice of its election to tender such 2023C Subordinated Bonds or portions thereof at the times and in the manner described above. Beneficial Owners will not have any rights to tender 2023C Subordinated Bonds directly to the Trustee. Procedures under which a Beneficial

Owner may direct a Direct Participant or DTC, or an Indirect Participant of DTC acting through a Director Participant of DTC, to exercise a tender option right in respect of 2023C Subordinated Bonds or portions thereof in an amount equal to all or a portion of such Beneficial Owner's beneficial ownership interest therein shall be governed by standing instructions and customary practices determined by such Direct Participant or Indirect Participant. During any period that the 2023C Subordinated Bonds are registered in the name of DTC or its nominee, delivery of such 2023C Subordinated Bonds required to be tendered for purchase shall be effected by the transfer by a Direct Participant on the applicable Purchase Date of a book-entry credit to the account of the Trustee of a beneficial ownership interest in such 2023C Subordinated Bonds. See APPENDIX C – "BOOK-ENTRY SYSTEM."

Mandatory Purchase on the Mandatory Purchase Date

While in the Daily Mode or Weekly Mode, the 2023C Subordinated Bonds are subject to mandatory purchase at the Purchase Price (each, a "Mandatory Purchase Date") on (i) any Conversion Date (or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date not failed to occur), (ii) any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (iii) the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility securing such 2023C Subordinated Bonds, (iv) the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement or Liquidity Facility which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2023C Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee's receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2023C Subordinated Bonds and in no event later than the day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (v) any Business Day specified by SMUD with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee's receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2023C Subordinated Bonds.

Notice of mandatory purchase shall be given by the Trustee in writing to the Holders of such 2023C Subordinated Bonds subject to mandatory purchase no less than 10 days prior to the applicable Mandatory Purchase Date (or no less than three days with respect to a mandatory purchase described in clause (v) of the paragraph above). From and after the Mandatory Purchase Date, interest on the 2022C Subordinated Bonds subject to mandatory purchase will cease to accrue.

Remarketing of 2023C Subordinated Bonds

The Remarketing Agent shall use its best efforts pursuant to the terms and conditions of the Remarketing Agreement to offer for sale:

(i) all 2023C Subordinated Bonds or portions thereof as to which a Tender Notice has been delivered; and

(ii) all 2023C Subordinated Bonds required to be purchased on a Mandatory Purchase Date pursuant to a Conversion, a Substitution or on a Mandatory Purchase Date specified by SMUD with the consent of the Liquidity Provider as further described in clause (v) under "Mandatory Purchase on the Mandatory Purchase Date" above; and

(iii) any Liquidity Provider Bonds as described in the Subordinate Resolution.

The Remarketing Agent shall not remarket 2023C Subordinated Bonds to SMUD or any affiliate thereof. In connection with the remarketing of any 2023C Subordinated Bonds with respect to which

notice of redemption or notice of mandatory purchase has been given, the Remarketing Agent shall notify each person to which such 2023C Subordinated Bonds are remarketed of such notice of redemption or notice of mandatory purchase.

Anything in the Subordinate Resolution to the contrary notwithstanding, if there shall have occurred and be continuing a Liquidity Provider Failure with respect to the 2023C Subordinated Bonds, the Remarketing Agent will not remarket such 2023C Subordinated Bonds. All other provisions of the Subordinate Resolution, including without limitation, those relating to the setting of interest rates and Interest Periods and mandatory and optional purchases, will remain in full force and effect during the continuance of such Liquidity Provider Failure.

Draws on Liquidity Facility

On each [date on which a 2023C Subordinated Bond is to be purchased][Mandatory Purchase Date], if a Remarketing Agent gives notice to the Trustee pursuant to the Subordinate Resolution that it has been unable to remarket any tendered 2023C Subordinated Bonds or if the Trustee has not received from a Remarketing Agent an amount sufficient to pay the Purchase Price of tendered 2023C Subordinated Bonds by 12:00 noon, New York City time, on the Purchase Date, the Trustee shall draw on the Liquidity Facility (or, if there is no Liquidity Facility, request funds from SMUD) by 12.15 p.m., New York City time, in an amount equal to the Purchase Price of all the 2023C Subordinated Bonds which have not been successfully remarketed.

If a Liquidity Facility is in effect, on each date on which a 2023C Subordinated Bond secured by the Liquidity Facility is to be purchased, the Trustee, by demand given by Electronic Means by 12:15 p.m., New York City time, will draw on the Liquidity Facility in accordance with the terms thereof so as to receive thereunder by 2:45 p.m., New York City time, on such date an amount, in immediately available funds, sufficient, together with the proceeds of the remarketing of such 2023C Subordinated Bonds on such date, to enable the Trustee to pay the Purchase Price in connection therewith. The Trustee shall deposit said proceeds in the Liquidity Facility Purchase Account established for the 2023C Subordinated Bonds pursuant to the Subordinate Resolution.

The Initial Liquidity Facility shall constitute the initial Liquidity Facility under the Subordinate Resolution. See “THE INITIAL LIQUIDITY FACILITY.”

Source of Funds for Purchase of 2023C Subordinated Bonds

The Trustee shall purchase 2023C Subordinated Bonds subject to mandatory tender for purchase on each Mandatory Purchase Date pursuant to the Subordinate Resolution (“Tendered Bonds”) from the tendering owners at the applicable Purchase Price by wire transfer in immediately available funds. Funds for the payment of such Purchase Price shall be derived solely from the following sources in the order of priority indicated and neither of SMUD or the Trustee shall be obligated to provide funds from any other source:

- (i) immediately available funds on deposit in the Remarketing Proceeds Account established for the 2023C Subordinated Bonds under the Subordinate Resolution;
- (ii) immediately available funds on deposit in the Liquidity Facility Purchase Account established for the 2023C Subordinated Bonds under the Subordinate Resolution; and
- (iii) moneys of SMUD on deposit in the District Purchase Account established for the 2023C Subordinated Bonds under the Subordinate Resolution.

If a Liquidity Facility is in effect with respect to the 2023C Subordinated Bonds, then SMUD may, but shall not be obligated to, deposit amounts into the District Purchase Account established for the 2023C Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2023C Subordinated Bonds and the Liquidity Facility Purchase Account established for the 2023C Subordinated Bonds are insufficient therefor.

Inadequate Funds for Tenders

If moneys sufficient to pay the Purchase Price of all Tendered Bonds to be purchased on any Purchase Date are not available (1) no purchase shall be consummated of Tendered Bonds on such Purchase Date; (2) all Tendered Bonds shall be returned to the Holders thereof; and (3) all remarketing proceeds with respect to such 2023C Subordinated Bonds shall be returned to Remarketing Agent for return to the persons providing such moneys. All Tendered Bonds (other than Liquidity Provider Bonds) will bear interest at []% per annum during the period of time from and including the applicable Purchase Date to (but not including) the date that all such Tendered Bonds are successfully remarketed, redeemed, purchased or paid (the “Delayed Remarketing Period”).

During the Delayed Remarketing Period, SMUD may (1) direct the conversion of Tendered Bonds without complying with the applicable notice requirements for such conversion; (2), subject to the terms of the Remarketing Agreement, the Remarketing Agent will continue to use its best effort to remarket all of the Tendered Bonds at rates up to and including the Maximum Rate; (3) upon five Business Days’ notice, redeem Tendered Bonds as a whole or in part on any Business Day at a redemption price equal to the principal amount thereof, together with accrued interest thereon to the date fixed for redemption, without premium. During the Delayed Remarketing Period, interest on Tendered Bonds will be paid to the Holders thereof (i) on the first Business Day of each calendar month and (ii) on the last day of the Delayed Remarketing Period.

Alternate Credit Enhancement and Alternate Liquidity Facility

If at any time there shall have been delivered to the Trustee (i) an Alternate Credit Enhancement or an Alternate Liquidity Facility in substitution for a Liquidity Facility then in effect, (ii) a Favorable Opinion of Bond Counsel, (iii) a written Opinion of Counsel for the provider of the Alternate Credit Enhancement or Alternate Liquidity Facility, as applicable, to the effect that such Alternate Credit Enhancement or Alternate Liquidity Facility is a valid, legal and binding obligation of the provider thereof, and (iv) unless waived by such entity, written evidence satisfactory to the related Credit Provider and the Liquidity Provider of the provision for purchase from the Liquidity Provider of all Liquidity Provider Bonds, at a price equal to the principal amount thereof plus accrued and unpaid interest, and payment of all amounts due to the Credit Provider and the Liquidity Provider under the applicable Reimbursement Agreement or Liquidity Facility on or before the effective date of such Alternate Credit Enhancement or Alternate Liquidity Facility, then the Trustee shall accept such Alternate Credit Enhancement or Alternate Liquidity Facility, as applicable, on the Substitution Date and shall surrender the Liquidity Facility then in effect to the provider thereof on the Substitution Date. The Trustee shall give notice of such proposed substitution by mail to the Beneficial Owners of the 2023C Subordinated Bonds no less than fifteen days prior to the proposed Substitution Date. If any condition to the substitution is not satisfied, the substitution shall not occur but the 2023C Subordinated Bonds shall remain subject to mandatory purchase on the proposed Substitution Date. See “Mandatory Purchase on the Mandatory Purchase Date” above.

Optional Redemption

The 2023C Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to redemption at the option of SMUD in whole or in part (provided that no 2023C Subordinated Bonds shall

remain Outstanding except in Authorized Denominations) on any Business Day at a Redemption Price equal to the principal amount, or portions thereof, of such 2023C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

Mandatory Sinking Fund Redemption

The 2023C Subordinated Bonds are subject to mandatory redemption in part, by lot, on August 15 in the years shown in the following table, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the date of redemption in an amount equal to the Sinking Fund Installments for such 2023C Subordinated Bonds for such date:

Years (August 15)	Sinking Fund Installment	Years (August 15)	Sinking Fund Installment
2034	\$11,665,000	2038	\$19,090,000
2035	\$11,320,000	2039	\$19,545,000
2036	\$10,970,000	2040	\$20,005,000
2037	\$18,640,000	2041 [†]	\$20,785,000

[†] Stated Maturity

Selection of Bonds to be Redeemed; Notice of Redemption

Whenever provision is made for the redemption of less than all of the 2023C Subordinated Bonds, the Trustee shall select the 2023C Subordinated Bonds to be redeemed, from the outstanding 2023C Subordinated Bonds not previously called for redemption, by lot in any manner which the Trustee deems fair; provided, however, that Liquidity Provider Bonds will be redeemed prior to the redemption of other 2023C Subordinated Bonds.

Notice of redemption shall be mailed by first-class mail by the Trustee, not less than 10 days prior to the redemption date, to the Holder of any 2023C Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023C Subordinated Bonds. Each notice of redemption shall state the redemption date, the place of redemption, the principal amount to be redeemed, and shall also state that the interest on the 2023C Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023C Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the applicable redemption date to pay the applicable redemption price of the 2023C Subordinated Bonds to be redeemed.

Any notice of optional redemption may be rescinded by written notice given to the Trustee by SMUD no later than two Business Days prior to the dated specified for redemption.

Notwithstanding the foregoing, notice of redemption shall not be required for 2023C Subordinated Bonds redeemed on a Mandatory Purchase Date.

DEBT SERVICE SCHEDULE

The following table sets forth the debt service requirements with respect to the 2023C Subordinated Bonds assuming no early redemptions. See also APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Debt Service Requirements.*”

Calendar Year	2023C Subordinated Bonds Principal	2023C Subordinated Bonds Interest ⁽¹⁾	Total
	\$	\$	\$

\$	\$	\$
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⁽¹⁾ Based on the Financial Products Agreement rate of 0.7179%% per annum.

SPECIAL CONSIDERATIONS RELATING TO THE 2023C SUBORDINATED BONDS

Initial Liquidity Facility

Concurrently with the issuance of the 2023C Bonds, SMUD will enter into the Initial Liquidity Facility with the Initial Liquidity Provider in order to provide for the payment of the Purchase Price of the 2023C Subordinated Bonds that are tendered for purchase and not remarketed. Pursuant to the terms of the Initial Liquidity Facility, with respect to 2023C Subordinated Bonds that are tendered for purchase and not remarketed, the Initial Liquidity Provider will be obligated to purchase the 2023C Subordinated Bonds, subject to the occurrence of certain suspension and termination events, as more fully described herein. Unless otherwise terminated or extended pursuant to its terms, the Initial Liquidity Facility will expire on [].

There can be no assurance that SMUD will be able to obtain an extension of the Initial Liquidity Facility. The Initial Liquidity Provider is under no obligation to extend the Initial Liquidity Facility beyond the scheduled expiration thereof.

As provided herein under the caption “RATINGS,” the initial rating on the 2023C Subordinated Bonds is dependent on the ratings of the Bank. The Initial Liquidity Provider’s current short-term ratings are predicated upon, among other things, a level of reserves required by banking institutions. The level of reserves maintained by the Initial Liquidity Provider could change over time and this could result in a downgrading of the short-term ratings on the 2023C Subordinated Bonds. The Initial Liquidity Provider is not contractually bound to maintain its present level of reserves in the future nor is it contractually bound to maintain its current credit rating. No provision has been made for replacement of or substitution for the Liquidity Facility in the event of any deterioration in the financial condition of the Initial Liquidity Provider.

The Initial Liquidity Provider is subject to regulation and supervision by the Federal Deposit Insurance Corporation, the Federal Reserve Board and other regulatory bodies. New regulations could impose restrictions upon the Initial Liquidity Provider that would restrict its ability to respond to competitive pressures. Various legislative or regulatory changes could dramatically impact the banking industry as a whole and the Initial Liquidity Provider specifically. The banking industry is highly competitive in many of the markets in which the Initial Liquidity Provider operates. Such competition directly impacts the financial performance of the Initial Liquidity Provider. Any significant increase in such competition could adversely impact the Initial Liquidity Provider.

See APPENDIX H – “INFORMATION CONCERNING THE INITIAL LIQUIDITY PROVIDER” for more information related to the Initial Liquidity Provider.

Bankruptcy or Insolvency of the Initial Liquidity Provider

The obligations of the Initial Liquidity Provider under the Initial Liquidity Facility are general obligations of the Initial Liquidity Provider and rank equally in priority of payment and in all other respects with all other unsecured obligations of the Initial Liquidity Provider. In the event of a bankruptcy or insolvency or if for any other reason the Initial Liquidity Provider fails or is unable to honor a draw on the Initial Liquidity Facility, SMUD has no obligation to pay the Purchase Price of 2023C Subordinated Bonds upon their optional or mandatory tender if the Initial Liquidity Provider fails or is unable to honor a draw on the Initial Liquidity Facility and failure to pay the Purchase Price of such 2023C Subordinated Bonds is not an Event of Default.

Mandatory Tender upon Default under Initial Liquidity Facility

The occurrence of an event of default under the Initial Liquidity facility may cause the mandatory tender of the 2023C Subordinated Bonds. In such event, a Bondholder whose 2023C Subordinated Bonds are required to be tendered may not have the opportunity to hold such 2023C Subordinated Bonds for a time period consistent with such Bondholder’s original investment intentions.

The Remarketing Agent is Paid by SMUD

The Remarketing Agent’s responsibilities include determining the interest rate from time to time and remarketing the 2023C Subordinated Bonds that are optionally or mandatorily tendered by the owners thereof (subject, in each case, to the terms of the Subordinate Resolution and the Remarketing Agreement), all as further described in this Official Statement. The Remarketing Agent is appointed by SMUD and is paid by SMUD for its services. As a result, the interests of the Remarketing Agent may differ from those of existing Holders and potential purchasers of 2023C Subordinated Bonds.

The Remarketing Agent Routinely Purchases Bonds for its Own Account

The Remarketing Agent is permitted, but not obligated, to purchase Tendered Bonds for its own account. The Remarketing Agent, in its sole discretion, routinely acquires tendered bonds for its own inventory in order to achieve a successful remarketing of such bonds (i.e., because there otherwise are not enough buyers to purchase such bonds) or for other reasons. However, the Remarketing Agent is not obligated to purchase bonds, including the 2023C Subordinated Bonds, and may cease doing so at any time without notice. The Remarketing Agent may also make a market in the 2023C Subordinated Bonds by routinely purchasing and selling 2023C Subordinated Bonds other than in connection with an optional tender and remarketing. Such purchases and sales may be at or below par. However, the Remarketing Agent is not required to make a market in the 2023C Subordinated Bonds. If the Remarketing Agent purchases 2023C Subordinated Bonds for its own account, it may offer those 2023C Subordinated Bonds at a discount to par to some investors. The Remarketing Agent may also sell any 2023C Subordinated Bonds it has purchased to one or more affiliated investment vehicles for collective ownership or enter into derivative arrangements with affiliates or others in order to reduce its exposure to the 2023C Subordinated Bonds. The purchase of 2023C Subordinated Bonds by the Remarketing Agent may create the appearance that there is greater third party demand for the 2023C Subordinated Bonds in the market than is actually the case. The practices described above also may reduce the supply of 2023C Subordinated Bonds that may be tendered in a remarketing.

2023C Subordinated Bonds May be Offered at Different Prices on Any Date

The Remarketing Agent is required to determine on the Rate Determination Date the applicable rate of interest that, in its judgment, is the lowest rate that would permit the sale of 2023C Subordinated Bonds at par plus accrued interest, if any, on the date the rate becomes effective (the “Effective Date”). The interest rate will reflect, among other factors, the level of market demand for the 2023C Subordinated Bonds (including whether the Remarketing Agent is willing to purchase 2023C Subordinated Bonds for its own account). The Remarketing Agreement requires that the related Remarketing Agent use its best efforts to sell Tendered Bonds at par, plus accrued interest. There may or may not be 2023C Subordinated Bonds tendered and remarketed on a Rate Determination Date. As an owner of 2023C Subordinated Bonds, the Remarketing Agent may sell 2023C Subordinated Bonds at varying prices, including at a discount to par, to different investors on a Rate Determination Date or any other date. The Remarketing Agent is not obligated to advise purchasers in a remarketing if it does not have third party buyers for all of its respective Series of 2023C Subordinated Bonds at the remarketing price.

The Ability to Sell the 2023C Subordinated Bonds Other Than Through the Tender Process May Be Limited

While the Remarketing Agent may buy and sell 2023C Subordinated Bonds, it is not obligated to do so and may cease doing so at any time without notice. Thus, investors who purchase the 2023C Subordinated Bonds, whether in a remarketing or otherwise, should not assume that they will be able to sell their 2023C Subordinated Bonds other than by tendering through the Trustee in accordance with the tender process.

The Initial Liquidity Provider may fail to purchase Tendered Bonds even though it is obligated to do so. In such an event, Tendered Bonds would be returned to the Holders thereof and bear interest at the Maximum Rate until such 2023C Subordinated Bonds can be remarketed. It is not certain that following a failure to purchase 2023C Subordinated Bonds, a secondary market for the 2023C Subordinated Bonds will develop.

Under Certain Circumstances, The Remarketing Agent May Be Removed, Resign or Cease Remarketing the 2023C Subordinated Bonds, Without a Successor Being Named.

Under certain circumstances the Remarketing Agent may be removed or have the ability to resign or cease its remarketing efforts, without a successor having been named, subject to the terms of the Remarketing Agreement.

SECURITY FOR THE SUBORDINATED BONDS

Limited Obligations; Pledge of Revenues

The Subordinated Bonds, including the 2023C Subordinated Bonds, are revenue bonds and are not secured by the taxing power of SMUD. The principal of and premium, if any, and interest on the Subordinated Bonds (including the 2023C Subordinated Bonds), together with other Parity Subordinated Debt, are payable exclusively from the Net Subordinated Revenues of the Electric System of SMUD. The Subordinated Bonds and all other Parity Subordinated Debt are secured by a pledge of Revenues, subject to the condition that out of Revenues:

First: There shall be applied all sums required for maintenance and operation costs of the Electric System and all Energy Payments not included in maintenance and operation costs.

Second: There shall be applied all sums required for the payment of the principal of (including any premium thereon) and interest on the Senior Bonds and all other Parity Bonds, together with any sinking fund or reserve fund payments on the Senior Bonds and all other Parity Bonds.

Third: There shall be applied all sums required for the payment of the principal of (including any premium thereon) and interest on the Subordinated Bonds and all other Parity Subordinated Debt, together with any sinking fund or reserve fund payments on the Subordinated Bonds and all other Parity Subordinated Debt.

All remaining Revenues, after making the foregoing allocations, will be available to SMUD for all lawful SMUD purposes.

From time to time, SMUD may deposit in the Rate Stabilization Fund from such remaining Revenues such amounts as SMUD shall determine, provided that deposits in the Rate Stabilization Fund from remaining Revenues in any fiscal year may be made until (but not after) the date 120 days after the end of such fiscal year. SMUD may withdraw amounts from the Rate Stabilization Fund only for inclusion in Revenues for any fiscal year, such withdrawals to be made until (but not after) 120 days after the end of such fiscal year. All interest or other earnings upon deposits in the Rate Stabilization Fund shall be withdrawn therefrom and accounted for as Revenues. No deposit of Revenues to the Rate Stabilization Fund may be made to the extent such Revenues were included in any certificate submitted in connection with the issuance of additional bonds and withdrawal of the Revenues from the Revenues employed in rendering said certificate would have caused noncompliance with the additional bond provisions. See APPENDIX A – “RATES AND CUSTOMER BASE – Rates and Charges” for a description of the balance in the Rate Stabilization Fund.

Neither the credit nor the taxing power of SMUD is pledged to the payment of the Subordinated Bonds and the general fund of SMUD is not liable for the payment thereof. The owners of the Subordinated Bonds cannot compel the exercise of any taxing power of SMUD or the forfeiture of any of its property. The Subordinated Bonds are not a legal or equitable pledge, charge, lien or encumbrance upon any of SMUD’s property (including the Electric System) or upon any of its income, receipts or revenues except the Net Subordinated Revenues of the Electric System to the extent of the pledge thereof contained in the Subordinate Resolution.

Subordinate Pledge

The Subordinated Bonds are subordinate in right of payment to the Senior Bonds and other Parity Bonds. As of May 1, 2023, Senior Bonds in the aggregate principal amount of \$1,841,715,000 were outstanding. [Immediately following the issuance of the 2023C Subordinated Bonds and the refunding of the 2013A Refunded Senior Bonds, Senior Bonds in the aggregate principal amount of \$[_____] will be outstanding.] The Senior Bonds are issued pursuant to the Senior Bond Resolution. See APPENDIX E – “SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION” for a description of certain provisions of the Senior Bond Resolution.

The Initial Liquidity Facility

The Initial Liquidity Facility does not provide security for the payment of principal or Redemption Price of or interest on the 2023C Subordinated Bonds and only provides for the purchase of tendered 2023C Subordinated Bonds.

No Reserve Fund

No reserve fund will be established or funded for the benefit of the 2023C Subordinated Bonds.

Rates and Charges

SMUD has covenanted in the Subordinate Resolution to establish and at all times maintain and collect rates and charges for the sale or use of electric energy generated, transmitted, distributed or furnished by SMUD which, together with certain items of other income permitted under the Subordinate Resolution, will yield Revenues at least sufficient, with respect to the ensuing 12 months, to pay and provide for (1) all sums required for Maintenance and Operation Costs and Energy Payments not included in Maintenance and Operation Costs, (2) all payments with respect to Parity Bonds, and (3) the total amount required for the payment of principal and interest, together with any sinking fund or reserve fund payments, on the Subordinated Bonds and all Parity Subordinated Debt, in each case during such 12 months.

For purposes of the calculations of payments to be made pursuant to the Subordinate Resolution, the interest rates on Parity Bonds and Parity Subordinated Debt which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds and Parity Subordinated Debt bear a rate or rates of interest for a known period or periods of time, such rate or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

For purposes of the above calculations of principal of and interest on Parity Bonds or Parity Subordinated Debt, if a Financial Products Agreement has been entered into by SMUD with respect to any Parity Bonds or Parity Subordinated Debt, interest on such Parity Bonds or Parity Subordinated Debt shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds or Parity Subordinated Debt in such fiscal year or period at the rate or rates stated in such Parity Bonds or Parity Subordinated Debt plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

For purposes of the above calculations of principal of and interest on Parity Bonds and Parity Subordinated Debt, Excluded Principal Payments shall be disregarded (but interest on the Parity Bonds

and Parity Subordinated Debt to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Bonds and Parity Subordinated Debt are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included.

SMUD has full power to establish rates and charges for all SMUD services, and the levels of such rates are not subject to review or regulation by any other governmental agency, either federal or state.

See Appendix D hereto for the definitions of certain capitalized terms used in this section.

Limitations on Additional Obligations Payable from Net Subordinated Revenues

The Subordinate Resolution provides that SMUD will not, so long as any Subordinated Bonds are outstanding, issue any obligations payable in whole or in part from Net Subordinated Revenues except the following:

(a) Refunding Subordinated Bonds issued to refund all or part of the Parity Bonds or Subordinated Bonds;

(b) Additional Parity Subordinated Debt (including additional Subordinated Bonds under the Subordinate Resolution and additional Parity Subordinated Debt), with an equal lien and charge upon the Net Subordinated Revenues, but only subject to the following conditions:

(1) SMUD shall not then be in default under the Senior Bond Resolution, the Subordinate Resolution or other resolutions authorizing the issuance of Parity Bonds or Parity Subordinated Debt payable out of Revenues; and

(2) SMUD shall certify to the Trustee (i) that Net Revenues, after completion of any improvements proposed to be financed by such additional Parity Subordinated Debt, will be sufficient to pay the principal of and interest (and bond reserve fund requirements, if any) on all Parity Bonds and Parity Subordinated Debt then outstanding and on such additional Parity Subordinated Debt; and (ii) that Net Revenues, for a period of 12 consecutive months during the 24 months immediately preceding the date upon which such Parity Subordinated Debt shall become outstanding, shall have been at least equal to 1.10 times the sum of (i) the annual interest on Parity Bonds and Parity Subordinated Debt, (ii) the principal amount of Parity Bonds and Parity Subordinated Debt falling due, and (iii) the amount of minimum sinking fund payments falling due on Parity Bonds and Parity Subordinated Debt, all as computed for the year in which such sum shall then be a maximum, including both then outstanding Parity Bonds and Parity Subordinated Debt and the Parity Subordinated Debt then proposed to be issued.

The calculation described above shall be made by taking the following into consideration:

(A) if rates and charges in effect on the date upon which such Parity Subordinated Debt will become outstanding will be greater than those in effect during the entire twelve months elected for the foregoing computation, then the Net Revenues for said period of twelve months may be augmented by the estimated increase in Net Revenues computed to accrue to the Electric System in the first twelve months during which such rates and charges shall be in effect;

(B) if such Parity Subordinated Debt or any portion thereof shall be issued for the purpose of acquiring an existing revenue-producing electric system, the estimated pro forma net revenues of such existing system (calculated on the basis of assumed SMUD ownership and operation during such period but otherwise on the basis of actual gross revenues of such existing

system at the rates actually charged therefor) for the preceding twelve months may be added to the actual Net Revenues of the Electric System for the twelve months elected for said computation and treated as if actually received by the Electric System during those twelve months;

(C) for purposes of the above calculations of principal of and interest on Parity Subordinated Debt, Excluded Principal Payments shall be disregarded (but interest on the Parity Subordinated Debt to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Subordinated Debt are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included;

(D) for purposes of the above calculations, the interest rates on Parity Bonds and Parity Subordinated Debt which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds and Parity Subordinated Debt bear a rate or rates of interest for a known period or periods of time, such interest rate or rates for such period or periods, and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate; and

(E) For purposes of the above calculations of principal of and interest on Parity Bonds and Parity Subordinated Debt, if a Financial Products Agreement has been or is being entered into by SMUD with respect to any Parity Bonds or Parity Subordinated Debt, interest on such Parity Bonds or Parity Subordinated Debt shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds or Parity Subordinated Debt in such fiscal year or period at the rate or rates stated in such Parity Bonds or Parity Subordinated Debt plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

(c) Revenue bonds which are junior and subordinate to the payment of the principal, premium, interest and reserve fund requirements for the Subordinated Bonds and all Parity Subordinated Debt and which subordinated revenue bonds are payable as to principal, premium, and interest, and also reserve fund requirements, if any, only out of Net Subordinated Revenues after the prior payment of all amounts required to be paid under the Subordinate Resolution from Net Subordinated Revenues for principal, premium, interest and reserve fund requirements for the Subordinated Bonds and all Parity Subordinated Debt, as the same become due and payable.

THE INITIAL LIQUIDITY FACILITY

The following is a summary of certain provisions of the Initial Liquidity Facility. This summary does not purport to be comprehensive. Reference should be made to the Initial Liquidity Facility for the complete text thereof, and the discussion herein is qualified by such reference. Unless otherwise noted in this Official Statement, all defined terms in this summary have the meanings ascribed to them in the Initial Liquidity Facility. For information regarding the Initial Liquidity Provider, see APPENDIX H – “THE INITIAL LIQUIDITY PROVIDER.”

[summary of provisions to be provided by bank counsel for review and insertion]

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SMUD owns and operates an electric system that has provided retail electric service since 1946. SMUD's current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. For a full description of SMUD, its history, organization, operations, and financial performance, certain developments in the energy markets, certain factors affecting the electric utility industry, including impacts from the COVID-19 pandemic, and certain regulatory and other matters, see APPENDIX A – "INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT."

ABSENCE OF LITIGATION REGARDING THE 2023C SUBORDINATED BONDS

SMUD is not aware of any action, suit or proceeding, threatened or pending, to restrain or enjoin the issuance, sale or delivery of the 2023C Subordinated Bonds, or in any way contesting or affecting the validity of the 2023C Subordinated Bonds or any of the proceedings of SMUD taken with respect to the 2023C Subordinated Bonds. SMUD is not aware of any action, suit or proceeding, threatened or pending, questioning the corporate existence of SMUD, or the title of the officers of SMUD to their respective offices, or the power and authority of SMUD to execute and deliver the 2023C Subordinated Bonds. For a description of certain litigation in which SMUD is involved, see APPENDIX A – "INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – LEGAL PROCEEDINGS."

UNDERWRITING

Barclays Capital Inc. (the "Underwriter") has agreed, subject to certain customary conditions to closing, to purchase the 2023C Subordinated Bonds from SMUD at an aggregate purchase price of \$_____ (being the aggregate principal amount of the 2023C Subordinated Bonds, [less Underwriter's discount of \$_____]). The Underwriter will be obligated to purchase all 2023C Subordinated Bonds if any 2023C Subordinated Bonds are purchased. The Underwriter has agreed to make a public offering of the 2023C Subordinated Bonds at the initial offering price set forth on the inside cover page hereof. The 2023C Subordinated Bonds may be offered and sold to certain dealers (including underwriters and other dealers depositing such bonds into investment trusts) at prices lower than such public offering price, and such public offering price may be changed, from time to time, by the Underwriter.

The Underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The Underwriter and its affiliates have, from time to time, performed, and may in the future perform, various investment banking services for SMUD for which they received or will receive customary fees and expenses.

In the ordinary course of its various business activities, the Underwriter and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of, or issued for the benefit of, SMUD.

MUNICIPAL ADVISOR

SMUD has retained PFM Financial Advisors LLC, as Municipal Advisor in connection with various matters relating to the delivery of the 2023C Subordinated Bonds. The Municipal Advisor assumes no responsibility for the accuracy, completeness or fairness of the information contained in this

Official Statement. The Municipal Advisor is an independent advisory firm and is not engaged in underwriting or distribution of securities. The Municipal Advisor will receive compensation that is contingent upon the sale, issuance and delivery of the 2023C Subordinated Bonds.

APPROVAL OF LEGAL PROCEEDINGS

The validity of the 2023C Subordinated Bonds and certain other legal matters are subject to the approval of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. The approving opinion of Bond Counsel will be delivered with the 2023C Subordinated Bonds in substantially the form appearing in APPENDIX F. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Certain legal matters will be passed on for the Underwriter by Nixon Peabody LLP, San Francisco, California, counsel to the Underwriter, and for the Initial Liquidity Provider by Chapman and Cutler, LLP, counsel to the Initial Liquidity Provider.

FINANCIAL STATEMENTS

SMUD's audited, consolidated financial statements for the years ended December 31, 2022 and December 31, 2021 are included in APPENDIX B attached to this Official Statement. These financial statements have been audited by Baker Tilly Virchow Krause, LLP, Madison, Wisconsin (the "Auditor"), for the periods indicated and to the extent set forth in their report thereon and should be read in their entirety. SMUD has not requested nor did it obtain permission from the Auditor to include the audited, consolidated financial statements as an appendix to this Official Statement. Accordingly, the Auditor has not performed any procedures to review the financial condition or operations of SMUD subsequent to the date of its report included therein, nor has it reviewed any information contained in this Official Statement.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD ("Bond Counsel"), based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2023C Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code") and is exempt from State of California personal income taxes. Bond Counsel is of the further opinion that interest on the 2023C Subordinated Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. Bond Counsel observes that, for tax years beginning after December 31, 2022, interest on the 2023C Subordinated Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2023C Subordinated Bonds. A complete copy of the proposed form of opinion of Bond Counsel is set forth in APPENDIX F hereto.

[To the extent the issue price of any maturity of the 2023C Subordinated Bonds is less than the amount to be paid at maturity of such 2023C Subordinated Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2023C Subordinated Bonds), the difference constitutes "original issue discount," the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the 2023C Subordinated Bonds which is excluded from gross income for federal income tax purposes and exempt from State of California personal income taxes. For this purpose, the issue price of a particular maturity of the 2023C Subordinated Bonds is the first price at which a substantial amount of such maturity of the 2023C Subordinated Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity

of the 2023C Subordinated Bonds accrues daily over the term to maturity of such 2023C Subordinated Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2023C Subordinated Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2023C Subordinated Bonds. Beneficial Owners of the 2023C Subordinated Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2023C Subordinated Bonds with original issue discount, including the treatment of Beneficial Owners who do not purchase such 2023C Subordinated Bonds in the original offering to the public at the first price at which a substantial amount of such 2023C Subordinated Bonds is sold to the public.]

2023C Subordinated Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) (“Premium Bonds”) will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a Beneficial Owner’s basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2023C Subordinated Bonds. SMUD has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2023C Subordinated Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the 2023C Subordinated Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2023C Subordinated Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel’s attention after the date of issuance of the 2023C Subordinated Bonds may adversely affect the value of, or the tax status of interest on, the 2023C Subordinated Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel is of the opinion that interest on the 2023C Subordinated Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the 2023C Subordinated Bonds may otherwise affect a Beneficial Owner’s federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner’s other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2023C Subordinated Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2023C Subordinated Bonds. Prospective purchasers of the 2023C Subordinated Bonds should consult their own

tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the 2023C Subordinated Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of SMUD, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. SMUD has covenanted, however, to comply with the requirements of the Code.

Bond Counsel's engagement with respect to the 2023C Subordinated Bonds ends with the issuance of the 2023C Subordinated Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend SMUD or the Beneficial Owners regarding the tax-exempt status of the 2023C Subordinated Bonds in the event of an audit examination by the IRS. Under current procedures, Beneficial Owners would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which SMUD legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the 2023C Subordinated Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2023C Subordinated Bonds, and may cause SMUD or the Beneficial Owners to incur significant expense.

Payments on the 2023C Subordinated Bonds generally will be subject to U.S. information reporting and possibly to "backup withholding." Under Section 3406 of the Code and applicable U.S. Treasury Regulations issued thereunder, a non-corporate Beneficial Owner of 2023C Subordinated Bonds may be subject to backup withholding with respect to "reportable payments," which include interest paid on the 2023C Subordinated Bonds and the gross proceeds of a sale, exchange, redemption, retirement or other disposition of the 2023C Subordinated Bonds. The payor will be required to deduct and withhold the prescribed amounts if (i) the payee fails to furnish a U.S. taxpayer identification number ("TIN") to the payor in the manner required, (ii) the IRS notifies the payor that the TIN furnished by the payee is incorrect, (iii) there has been a "notified payee underreporting" described in Section 3406(c) of the Code or (iv) the payee fails to certify under penalty of perjury that the payee is not subject to withholding under Section 3406(a)(1)(C) of the Code. Amounts withheld under the backup withholding rules may be refunded or credited against a Beneficial Owner's federal income tax liability, if any, provided that the required information is timely furnished to the IRS. Certain Beneficial Owners (including among others, corporations and certain tax-exempt organizations) are not subject to backup withholding. The failure to comply with the backup withholding rules may result in the imposition of penalties by the IRS.

CONTINUING DISCLOSURE UNDERTAKING

Pursuant to the Continuing Disclosure Agreement, SMUD will covenant for the benefit of the holders and the "Beneficial Owners" (as defined in the Continuing Disclosure Agreement) of the 2023C Subordinated Bonds to provide certain financial information and operating data relating to SMUD by not later than 180 days after the end of each of SMUD's fiscal years (presently, each December 31), commencing with the report for the year ending December 31, 2023 (the "Annual Report"), and to provide notices of the occurrence of certain listed events with respect to the 2023C Subordinated Bonds. The Annual Report will be filed by or on behalf of SMUD with the Municipal Securities Rulemaking Board (the "MSRB") through its Electronic Municipal Market Access system ("EMMA") and any notices of such listed events will be filed by or on behalf of SMUD with the MSRB through EMMA. The specific nature of the information to be contained in the Annual Report and the notices of listed events are set forth in the form of the Continuing Disclosure Agreement which is included in its entirety in

APPENDIX G hereto. SMUD's covenant will be made in order to assist the Underwriter in complying with Securities and Exchange Commission Rule 15c2-12.

[In a limited number of circumstances, certain of the annual reports, audited financial statements or listed event filings required to be made by SMUD during the last five years under its continuing disclosure undertakings were not connected to all of the CUSIP numbers of the bonds subject to the continuing disclosure undertakings. In addition, SMUD entered into two subordinated forward starting interest rate swaps in December 2019 and filed a notice of the interest rate swaps with the MSRB through EMMA in April 2020. A notice of rating upgrade on October 6, 2020, by Moody's Investors Service of the Northern California Gas Authority No. 1 Gas Project Revenue Bonds, Series 2007B, was also not filed until October 28, 2020.]

RATINGS

Fitch Ratings, Inc. ("Fitch") and S&P Global Ratings ("S&P") have assigned the 2023C Subordinated Bonds short-term ratings of "[]" and "[]," respectively, based on the delivery of the Initial Liquidity Facility by the Initial Liquidity Provider on the date of delivery of the 2023C Bonds, and underlying long-term ratings of "[AA (stable outlook)]" and "[AA (stable outlook)]."

Such ratings reflect only the views of such organizations and are not a recommendation to buy, sell or hold the 2023C Subordinated Bonds. Explanations of the significance of such ratings may be obtained only from the respective rating agencies. SMUD has furnished to Fitch and S&P certain information and materials concerning the 2023C Subordinated Bonds and itself. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that such ratings will continue for any given period or that they will not be revised downward, suspended or withdrawn entirely by the respective rating agencies, if in the judgment of such rating agency, circumstances so warrant. SMUD has not, other than as described under "CONTINUING DISCLOSURE UNDERTAKING" above, and the Underwriter has not undertaken any responsibility either to bring to the attention of the holders or beneficial owners of the 2023C Subordinated Bonds any proposed revision, suspension or withdrawal of any rating on the 2023C Subordinated Bonds or to oppose any such proposed revision, suspension or withdrawal. Any such downward revision, suspension or withdrawal of such ratings may have an adverse effect on the market price or marketability of the 2023C Subordinated Bonds.

VERIFICATION

Upon delivery of the 2023C Subordinated Bonds, [] (the "Verification Agent") will verify, from the information provided to it, the mathematical accuracy as of the date of the closing of the 2023C Subordinated Bonds of the computations contained in the provided schedules to determine that the anticipated receipts from the securities and cash deposits listed in the Underwriter's schedules, to be held in escrow, will be sufficient to pay, when due, the interest on and redemption requirements of the 2013A Refunded Senior Bonds. The Verification Agent will express no opinion on the assumptions provided to them.

MISCELLANEOUS

This Official Statement includes descriptions of the terms of the 2023C Subordinated Bonds, power purchase agreements with certain other parties, pooling and other agreements, the Subordinate Resolution and certain provisions of the Act. Such descriptions do not purport to be complete, and all such descriptions and references thereto are qualified in their entirety by reference to each such document.

Copies of the Subordinate Resolution, which forms a contract with the Holders of the 2023C Subordinated Bonds, will be made available upon request.

This Official Statement has been duly authorized by the Board of Directors of SMUD.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Chief Executive Officer and General Manager

APPENDIX A

**INFORMATION REGARDING
SACRAMENTO MUNICIPAL UTILITY DISTRICT**

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SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS

Heidi Sanborn, President
Rosanna Herber, Vice President
Brandon Rose
Nancy Bui-Thompson
Gregg Fishman
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Frankie McDermott, Chief Operating Officer
Jennifer Davidson, Chief Financial Officer
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Lora Anguay, Chief Zero Carbon Officer
Farres Everly, Chief Marketing & Communications Officer
Russell Mills, Treasurer
Lisa Limcaco, Controller

INTRODUCTION

General

The Sacramento Municipal Utility District (“SMUD”) owns and operates an electric system that has provided retail electric service since 1946. SMUD’s current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. See “THE SERVICE AREA AND ELECTRIC SYSTEM – The Service Area.”

Independent Governance

SMUD is an independently run community-owned organization. SMUD is not required by law to transfer any portion of its collections from customers to any local government.

SMUD is governed by a Board of Directors (the “Board”), which consists of seven directors elected by ward for staggered four-year terms. The Board determines policy and appoints the Chief Executive Officer and General Manager, who is responsible for SMUD’s overall management and day-to-day operations. The Chief Executive Officer and General Manager is responsible for the hiring and removal of all employees, other than the Chief Legal and Government Affairs Officer and General Counsel, the Internal Auditor and the Special Assistant to the Board, who are hired and may be removed only by the Board. The employment status of nearly all SMUD employees is governed by a civil service system administered by the Chief Executive Officer and General Manager.

The Board elects its President and Vice President annually to take office in January. The current members of the Board are as follows:

<u>Name</u>	<u>Occupation</u>	<u>Ward</u>	<u>Term Expires</u>
Brandon Rose.....	Air Pollution Specialist, California Environmental Protection Agency	Ward 1	December 31, 2024
Nancy Bui-Thompson.....	Chief Information Officer, Wellspace Health	Ward 2	December 31, 2024
Gregg Fishman	Communications Specialist	Ward 3	December 31, 2026
Rosanna Herber, Vice-President...	Retired Utility Director	Ward 4	December 31, 2026
Rob Kerth	Business Owner	Ward 5	December 31, 2024
Dave Tamayo.....	Retired Environmental Specialist	Ward 6	December 31, 2026
Heidi Sanborn, President	Executive Director, National Stewardship Action Council	Ward 7	December 31, 2026

SMUD’s senior management consists of the following executives:

Chief Executive Officer & General Manager. Paul Lau was named chief executive officer and general manager (“CEO & GM”) of SMUD in October 2020. He reports to the SMUD Board of Directors. As CEO & GM, he leads the sixth largest community-owned electric utility in the nation, serving a population of approximately 1.5 million residents and managing a \$2.1 billion budget. Mr. Lau previously served as SMUD’s Chief Grid Strategy & Operations Officer and has held several other executive leadership positions during his 41-year career at SMUD. He serves on several national and local boards, including the Large Public Power Council, California Municipal Utilities Association, American Public Power Association, and Smart Electric Power Alliance, and as a Commissioner of the Balancing Authority of Northern California (“BANC”). A registered professional electrical engineer in the State of California

(the “State”), Mr. Lau received his bachelor’s degree in electrical power engineering from California State University, Sacramento.

Chief Customer Officer. Brandy Bolden reports to the CEO & GM and oversees SMUD’s Customer and Community Services business unit. She is responsible for customer experience delivery across our residential and commercial customer segments. She provides leadership and oversight of customer operations including customer care and revenue management, business intelligence, strategic account management, customer experience and segmentation strategy, channel management, customer program and service delivery, and special assistance. She is also responsible for commercial development and business attraction and oversees Community Energy Services, which provides services and support for community choice aggregators. Since joining SMUD in 2003, Brandy has demonstrated strong leadership and held a variety of senior leadership roles, including leading the Customer & Community Services project management office and the dual role of director of Customer Care and Revenue Operations. Ms. Bolden led the team responsible for implementing time-of-day rates, streamlining the meter-to-cash processes, delivering key billing and payment experience enhancements and recognizing operational efficiencies that resulted in sustained annual savings for SMUD. Ms. Bolden holds a Bachelor of Arts in Sociology from University of California, Davis.

Chief Information Officer. Suresh Kotha reports to the CEO & GM and is responsible for SMUD’s information technology strategy, operations, infrastructure, IT Project Management Office, enterprise innovation process, and cybersecurity. More recently, Mr. Kotha has been leading many technology efforts that are integral to developing a grid of the future that will help us achieve our zero-carbon goal, including our Advanced Distribution Management System, the software platform that supports the full suite of distribution management and optimization, and next-generation network upgrades. Mr. Kotha joined SMUD in 2002 as a principal technical developer, with responsibility for designing and leading implementation and upgrades of multiple technology systems, including the SAP software platform and our meter-to-cash systems. He holds a Master of Technology in Computer Science from Jawaharlal Nehru Technology University and a Bachelor of Engineering in Electronics & Communications Engineering from Gulbarga University.

Chief Diversity Officer. Jose Bodipo-Memba reports to the CEO & GM and is responsible for human resources, workforce diversity and inclusion, workforce business planning and SMUD’s Sustainable Communities program. Mr. Bodipo-Memba joined SMUD in 2010 as an environmental specialist and became manager of Environmental Services in 2016. He most recently served as SMUD’s first director of Sustainable Communities. Mr. Bodipo-Memba holds a Bachelor of Arts degree in history from University of California, Berkeley and Masters of Business Administration from Drexel University.

Chief Strategy Officer. Scott Martin reports to the CEO & GM and is responsible for looking holistically at all strategies across the company and driving prioritization including zero carbon, rates and pricing, enterprise strategic planning and enterprise prioritization. Mr. Martin is a seasoned executive with more than 30 years of experience. Prior to assuming this role, Mr. Martin was a director for resource planning and new business strategy. Previous experience also includes customer strategy planning supervisor. Mr. Martin joined SMUD in 1999 and holds a Bachelor of Arts degree in economics from the University of California, Berkeley and a master of arts degree in economics from the University of Nevada, Las Vegas.

Chief Legal & Government Affairs Officer and General Counsel. Laura Lewis was named general counsel for SMUD in April 2014. In this position she serves as chief lawyer and manages SMUD’s legal office and its staff of eight attorneys. She also serves as the secretary to SMUD’s elected board of directors. She reports to the Board and to the CEO & GM and has responsibility for all legal matters in which SMUD is a party to, or has an interest in. Ms. Lewis also oversees SMUD’s government affairs and

reliability compliance department. In this capacity, she is responsible for management and coordination of all legislative matters and regulatory requirements affecting SMUD at the state and federal level, including the FERC-NERC electric reliability standards. Ms. Lewis joined SMUD in 1997 as a staff attorney, serving in that capacity through 1999, after which she moved to the San Francisco law firm Davis Wright Tremaine. In 2002, she returned to SMUD as a senior attorney. In 2010, she became assistant general counsel and in 2013 was appointed chief assistant general counsel. She holds a juris doctorate from McGeorge School of Law, where she won membership in the Order of the Coif honor society. She holds a bachelor's degree in political science from the University of California, San Diego and is a member of the American Bar Association, the Energy Bar Association, and the State Bar of California.

Chief Operating Officer. Frankie McDermott reports to the CEO & GM and is responsible for providing strategic leadership and tactical oversight related to the safe and reliable transmission and delivery of energy to customers, ensuring efficient planning, construction, operation and maintenance of transmission, and distribution facilities. This position has primary responsibility for the processes and functions related to system reliability and operations across SMUD. The Chief Operating Officer is also the safety leader for the enterprise, leader of operational efficiency and responsible for all non-IT capital investments. Prior to this role, Mr. McDermott served as Chief Energy Delivery Officer and Chief Customer Officer, responsible for SMUD's overall retail strategy. From 2010 to 2014, he served as customer services director, which included managing relationships with customer segments as SMUD moved forward with smart-grid technologies. Prior to that, he served as manager of enterprise performance and held positions in supply chain and in general services. Before joining SMUD in 2003, Mr. McDermott served in management roles in the semiconductor industry at NEC Electronics in Roseville, California and in Ireland. After engineering school in Ireland, he earned an MBA from Golden Gate University and completed the Advanced Management Program at the Haas School of Business at the University of California Berkeley.

Chief Zero Carbon Officer. Lora Anguay reports to the CEO & GM and is responsible for leadership oversight of SMUD's Energy Supply which includes Energy Trading and Contracts and SMUD's Power Generation Assets. This role is also responsible for the delivery of SMUD's plan to provide 100% carbon free energy resources by 2030. This includes obtaining new grants and partnerships, overseeing research and development, designing distributed energy resource programs, enabling processes to settle distributed energy transactions with SMUD's customers and transitioning SMUD's power generation assets and energy contracts to zero carbon resources. Prior to assuming this role, Ms. Anguay was the director of Distribution Operations & Maintenance and was responsible for the day-to-day operations of SMUD's electric distribution grid. Before that she was an engineering designer, process control supervisor, project manager for smart meter deployment, a senior project manager for smart grid distribution automation and supervisor in Grid Assets. Before SMUD, she worked for Oracle Corporation as a finance manager and is a veteran who served in the United States Coast Guard. Ms. Anguay joined SMUD in 2004 and holds a Bachelor of Science degree in business administration from California State University, Sacramento.

Chief Financial Officer. Jennifer Davidson reports to the CEO & GM and is responsible for corporate accounting, procurement, treasury operations, risk management, and planning and budgets functions as well as key corporate services, including facilities, security, emergency operations and warehouse and fleet. Ms. Davidson joined SMUD in 2006 and previously served as director of budget, enterprise performance and risk management. Before joining SMUD, Ms. Davidson held management positions with investor-owned utility Southern California Edison and software and services provider Amdocs. She holds a bachelor's degree in geography from the University of California, Los Angeles.

Chief Marketing & Communications Officer. Farres Everly reports to the CEO & GM and since 2009 has been responsible for oversight of the SMUD brand, all external and internal strategic marketing and communications activities and campaigns and SMUD's outreach efforts to the community and the

State's capital region, including volunteerism, events and sponsorships. He previously served as the Director Marketing and Communications. Prior to joining SMUD, Mr. Everly held marketing leadership positions at VSP Vision Care, The Money Store and the Sacramento Metropolitan Chamber of Commerce. He holds a bachelor's degree in Journalism from California State University, Chico.

Treasurer. Russell Mills reports to the CFO. He oversees all treasury operations, including debt and cash management, banking, financial planning and forecasting, enterprise and commodity risk management, property and casualty insurance, and is responsible for developing and implementing capital borrowing strategies. Mr. Mills also serves as treasurer for the Transmission Agency of Northern California ("TANC"), the Central Valley Financing Authority ("CVFA"), the Sacramento Cogeneration Authority ("SCA"), the Sacramento Municipal Utility District Financing Authority ("SFA"), the Sacramento Power Authority ("SPA"), the Northern California Gas Authority No. 1 ("NCGA"), the Northern California Energy Authority ("NCEA") and BANC. Before joining SMUD in 2018 as Treasurer, Mr. Mills served as Chief Financial Officer of Southern California Public Power Authority. He also served as the Chief Financial Officer of the Power Supply Program at the California Department of Water Resources. He holds an MBA from Loyola Marymount University, and a bachelor's degree in economics from Towson University in Baltimore, Maryland. Mr. Mills also holds the Energy Risk Professional (ERP) designation and is a CFA level II candidate.

Controller. Lisa Limcaco reports to the CFO and is responsible for accounting and financial reporting at SMUD. Prior to her appointment as controller in 2020, Ms. Limcaco served as an assistant controller, manager of customer value, performance and projects, senior energy commodity specialist and as principal accountant for SMUD's joint powers authorities. Ms. Limcaco also serves as controller for TANC, CVFA, SCA, SFA, SPA, NCGA, NCEA and BANC. Before joining SMUD in 2010 as a senior accountant, Ms. Limcaco had 12-years' experience as the Director of Accounting and controller for a food service provider in Sacramento and over 13-years' experience in public accounting including audit manager at Price Waterhouse LLP. Ms. Limcaco holds a bachelor's degree in accounting from the University of Hawaii, a Master of Business Administration from Sacramento State University and is a Certified Public Accountant in the State.

THE SERVICE AREA AND ELECTRIC SYSTEM

The Service Area

SMUD is the primary distributor of electric power within an area of approximately 900 square miles in central California. The service area includes the State Capital, Sacramento, the populous areas principally to the northeast and south of the City of Sacramento (the "City" or "Sacramento") and the agricultural areas to the north and south. The City is located 85 miles northeast of San Francisco.

SMUD's electric system supplies power to a population of approximately 1.5 million with a total annual retail load of approximately 10,622 million kilowatt-hours ("kWh") for the year ended December 31, 2022. As the capital of the nation's most populous state, Sacramento benefits from the historically stabilizing influence of a large government sector. Sacramento is home to the State government headquarters, the Sacramento County seat, the City government and various special districts that combine to make government the largest single employment sector in the Sacramento area. Information technology, transportation, education and health services, leisure and hospitality, and construction round out the other major sectors of employment and industry in the area.

SMUD's annual peak load has averaged 3,113 Megawatts ("MW") over the last three years, with SMUD's record peak load of 3,299 MW occurring on July 24, 2006. In 2022, SMUD recorded its second highest peak load of 3,292 MW. SMUD reviews its load forecast, at a minimum, on an annual basis.

The Electric System

SMUD owns and operates an integrated electric system that includes generation, transmission and distribution facilities.

SMUD supplies power to its bulk power substations through a 230 kilovolt (“kV”) and 115 kV transmission system. This system transmits power from SMUD’s generation plants and interconnects with Pacific Gas & Electric (“PG&E”) and the Western Area Power Administration (“WAPA”). Power is distributed throughout Sacramento County via a 69 kV sub-transmission system with the exception of the City’s downtown area, which is served from the 115 kV transmission system. The downtown area is served from 115/12 kV and 115/21 kV substations. The distribution system serving the remainder of SMUD’s service territory is comprised of 69/12 kV substations with overhead and underground 12 kV distribution circuits.

BUSINESS STRATEGY

General

SMUD’s Board of Directors has established the following purpose and vision statements: “SMUD’s purpose is to enhance the quality of life for our customers and community by providing reliable and affordable electricity, and leading the transition to a clean energy future. SMUD’s vision is to be a trusted and powerful partner in achieving an inclusive, zero carbon economy. SMUD will leverage its relationships to accelerate innovation, ensure energy affordability and reliability, protect the environment, eliminate greenhouse gas emissions, catalyze economic and workforce development, promote environmental justice, and enhance community vitality for all.” The Board has adopted a set of Strategic Directions with related metrics, which it considers essential for the success of SMUD and for serving SMUD’s customers. These include competitive rates, access to credit markets, reliability, customer relations, environmental leadership, resource planning, enterprise risk management and safety. Some of the general elements in SMUD’s business strategy are:

- developing and maintaining a sustainable and reliable power supply to meet demand growth consistent with State mandates and the Board’s directions for renewable energy and the reduction of carbon emissions to zero by 2030. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *2030 Zero Carbon Plan*”;
- working closely with customers to provide the information, tools and incentives to assist them to more efficiently manage energy use, which will contribute to meeting greenhouse gas (“GHG”) emission targets and managing needle peak demand requirements (those 40 or so hours of the year with extreme temperatures when customer demand surges by up to 400 additional MW);
- managing price, volumetric and credit risks associated with energy and natural gas procurement;
- attracting, developing and retaining a diverse, skilled and engaged workforce that reflects SMUD’s values and is committed to achieving SMUD’s mission;
- retaining local decision making authority and operational independence; and
- collaborating regionally to attract new businesses and grow existing business to diversify and strengthen the Sacramento economy.

SMUD’s long-range business strategy focuses in part on ensuring financial stability by establishing rates that provide an acceptable fixed charge coverage ratio on a consolidated basis, taking into consideration the impact of capital expenditures and other factors on cash flow. SMUD’s Board policy sets

a minimum fixed charge coverage ratio of 1.50 times for annual budgets, though it generally plans to meet a minimum fixed charge coverage ratio of 1.70 times. Over the past ten years, the actual fixed charge coverage ratio has averaged 2.06 times on a consolidated basis. SMUD also manages its liquidity position by planning for a minimum of 150 days cash on hand and planning to maintain at least \$150 million of available capacity under its commercial paper and line of credit program. SMUD's commercial paper and line of credit program is currently authorized for \$400 million aggregate principal amount outstanding at any one time. As of March 1, 2023, SMUD had \$200 million aggregate principal amount of its commercial paper notes outstanding and \$200 million of the authorized aggregate principal amount of its commercial paper and line of credit program available for use. SMUD uses cash on hand and commercial paper and a line of credit to fund capital expenditures, then issues debt to reimburse itself for cash expended for qualified capital expenditures or to pay down the outstanding principal amount of its commercial paper program and line of credit. Over the past ten years, the days cash on hand has averaged 222. The resolutions securing SMUD's Senior Bonds and Subordinated Bonds (each as defined under the caption "CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS" below) do not require SMUD to maintain a minimum fixed charge coverage ratio, minimum days cash on hand or minimum available capacity under its commercial paper program and line of credit.

In addition, SMUD's business strategy focuses on servicing its customers in a progressive, forward-looking manner, addressing current regulatory and legislative issues and potential competitive forces.

Serving SMUD's Customers

SMUD continually looks for ways to better serve and partner with its customers to further strengthen customer loyalty, while providing reasonable product pricing. SMUD also has a focused effort to assist and incentivize customers to manage energy use more efficiently, which will contribute to meeting GHG emission targets and managing peak demand requirements as noted below.

Digital Enhancements. Customers are increasingly turning to digital channels including SMUD's mobile application, SMUD.org, e-mail and social media to interact and do business with SMUD. SMUD has delivered many digital enhancements, including bill pay functionality; online payment arrangements; start/stop/transfer move service; view of energy usage, chat, an enhanced outage map including a newly launched meter test functionality; and the SMUD Energy Store, which is an online marketplace for energy-related products. SMUD plans to continue efforts to provide more personalized digital customer experiences.

Advanced Metering, Infrastructure and Rate Design. As a community-owned organization, SMUD is dedicated to providing the tools and transparency in customer energy usage to enable customers to easily and positively affect energy usage, energy cost, and climate change. In 2012 SMUD installed smart technology, including 617,000 digital communicating smart meters, distribution automation systems and equipment to facilitate load management. The advanced technology has allowed SMUD to deliver tools such as text and e-mail bill alerts and online energy usage comparison charts to help customers manage energy use. SMUD has leveraged smart grid investments to improve reliability, reduce losses, reduce power quality issues and improve customer service through better, more timely information.

Time-of-Day Rates. On June 15, 2017, the Board approved time-of-day ("TOD") rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018 and was completed in the fourth quarter of 2019.

All of SMUD's business customers are also on time-based rates. On June 24, 2019, the Board approved an update to the commercial TOD rates to improve consistency and better align commercial rates with current energy market prices. Due to the impacts of the COVID-19 pandemic on SMUD's operations

and priorities, on August 20, 2020, the Board postponed the implementation of the commercial rate restructure for one year. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges.”

Renewable Options. SMUD’s customers have been increasingly interested in distributed energy resources, mainly through the installation of solar systems. As of January, 2023, approximately 47,615 of SMUD’s residential and commercial customers, approximately 7% of retail customers, had installed solar systems, representing approximately 324 MW of solar installations.

As the cost of energy storage continues to decline, SMUD anticipates an increase in behind-the-meter energy storage, mainly through the installation of battery storage systems. As of January 2023, approximately 1,183 of SMUD’s residential and commercial customers, approximately [2]% of retail customers, had installed storage systems, representing approximately 8 MW of storage.

As another option for solar, SMUD’s SolarShares® pilot program (the “SolarShares Pilot”) was established as a cost-effective and convenient way for commercial customers to meet their energy needs from solar power. The SolarShares Pilot offered SMUD commercial customers the opportunity to receive solar power without upfront costs or equipment installation through 5-, 10- or 20-year purchase contracts. Customers that entered into purchase contracts under the SolarShares Pilot receive up to half of their power from a utility-scale solar system. SMUD supplies solar power for the SolarShares Pilot either by building and maintaining utility-scale solar systems or by procuring solar power from third parties through power purchase agreements. The SolarShares Pilot generation was approximately 3.0% of retail sales in 2022. As of April 30, 2021, SMUD had completed the SolarShares Pilot and is not entering into new purchase contracts under the SolarShares Pilot.

Since January 2020, the California Building Code has required all newly constructed residential buildings under three stories to be powered by photovoltaic solar systems. A new home satisfies this requirement if it installs on-site solar or participates in an approved community solar or energy storage program. In February 2020, SMUD obtained approval from the California Energy Commission (“CEC”) to administer its own community solar program, called Neighborhood SolarShares® (“Neighborhood SolarShares”). SMUD’s Neighborhood SolarShares program can be used by developers of new low-rise residential buildings to satisfy the mandatory solar requirement. See also “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Rooftop Solar Mandate*.” Starting in 2023, the California Building Code’s mandatory solar requirement extends beyond low-rise residential properties, and other changes to the California Building Code’s community solar regulations took effect. SMUD revised its program to align with the new regulations and, in May 2023, obtained approval from the CEC to continue offering its Neighborhood SolarShares compliance option to newly constructed low rise residential homes in its service territory.

In addition to the SolarShares Pilot and Neighborhood SolarShares, SMUD maintains a voluntary green energy pricing program called Greenergy® (“Greenergy”). The Greenergy program allows customers the opportunity to pay an additional amount per month to ensure that either all or part of their electricity comes from green or carbon free energy sources. In 2022, the program allocated Renewable Energy Credits (“RECs”) equivalent to approximately 4.9% of retail sales to its participating customers.

Energy Efficiency. To further assist customers in managing energy usage and reducing regional carbon emissions and air pollution, SMUD offers an extensive array of energy efficiency and building electrification programs and services including financial incentives, loans, energy audits and education. In addition, SMUD has partnered with local developers to incorporate energy efficiency and all-electric construction measures into new residential and commercial construction, which helps developers plan and design efficient, cost-effective and low or zero-emission buildings. As part of SMUD’s 2019 Integrated

Resource Plan (“IRP”), SMUD set a goal for regional carbon emissions through transport and building electrification that aims to reduce carbon emissions in buildings and transport by 64% over the next 20 years. SMUD’s focus on electrification is continued in the Zero Carbon Plan (defined and discussed below). SMUD was the first electric utility in the country to set its efficiency goals based on carbon reductions, allowing building electrification and energy efficiency to both count toward meeting SMUD’s efficiency goals. This is a significant opportunity, as converting a typical home today to all-electric saves more than three times the carbon emissions compared to doing a major energy efficiency upgrade alone to the same building. See “POWER SUPPLY AND TRANSMISSION – Projected Resources.”

Sustainable Power Supply and Transmission

Maintaining a sustainable power supply entails focusing efforts on researching, promoting and implementing new renewable energy technologies and sources to meet SMUD’s long-term commitment to reducing carbon emissions and providing a reliable energy supply. SMUD defines a sustainable power supply as one that reduces SMUD’s GHG emissions to serve retail customer load to zero by 2030. See “– 2030 Zero Carbon Plan” below. SMUD is planning to achieve zero GHG emissions to serve retail customer load through investments in energy efficiency, clean distributed energy resources, renewables portfolio standard (“RPS”) eligible renewables, energy storage, large hydroelectric generation, clean and emissions free fuels, and new technologies and business models. Additionally, SMUD plans to continue pursuing GHG emissions reductions through vehicle, building and equipment electrification. At the same time, SMUD’s plans for maintaining a sustainable power supply include assuring the reliability of SMUD’s electric system, minimizing environmental impacts on land, habitat, water and air quality, and maintaining competitive rates relative to other electricity providers in the State.

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills regulate GHG emissions and encourage greater investment in energy efficiency and sustainable generation alternatives, principally through more stringent RPS. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings” herein.

2030 Zero Carbon Plan. In July 2020, the Board declared a climate emergency and adopted a resolution calling for SMUD to take significant and consequential actions to reduce its carbon footprint by 2030. On April 28, 2021, the Board approved SMUD’s 2030 Zero Carbon Plan (the “Zero Carbon Plan”). The Zero Carbon Plan is intended to be a flexible roadmap for SMUD to eliminate carbon emissions from its electricity production by 2030 while maintaining reliable and affordable service. To achieve these goals the Zero Carbon Plan is focused on four main areas: natural gas generation repurposing, proven clean technologies, new technologies and business models and financial impacts and options. SMUD plans to revisit the Zero Carbon Plan annually.

The natural gas generation repurposing focus of the Zero Carbon Plan calls for exploring the replacement of two of SMUD’s five Local Gas-Fired Plants (as defined herein) and the retooling of the other three Local Gas-Fired Plants. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Local Gas-Fired Plants.*” Based on SMUD’s studies to date, SMUD estimates that McClellan (as defined herein) and the Campbell Soup Project (as defined herein) can be replaced by mid-decade. Final decisions about the replacement of these two Local Gas-Fired Plants will be based on additional reliability studies and engagement with the community. As part of the Zero Carbon Plan, SMUD is also exploring converting the Carson Project (as defined herein) and the Procter & Gamble Project (as defined herein) to reliability use operations only and investigating the use of alternative fuels like Renewable Natural Gas-biomethane (RNG-biomethane), hydrogen and other biofuels for the Carson Project, the Procter & Gamble Project, and the Consumnes Power Plant (as defined herein). In addition, SMUD is investigating new technologies such as long duration energy storage, carbon capture and sequestration, hydrogen and other

clean fuel alternatives to help support natural gas repurposing. All final generator configurations are subject to reliability assessments.

The proven clean technologies focus of the Zero Carbon Plan calls for SMUD to procure approximately 1,100 to 1,500 MW of utility-scale solar photovoltaic (“PV”) generating capacity, 700 to 1,100 MW of local utility-scale battery storage, 300 to 500 MW of wind generating capacity, and 100 to 220 MW of geothermal generating capacity. The Zero Carbon Plan also estimates that customer installation of approximately 500 to 750 MW of behind-the-meter solar PV generating capacity and approximately 50 to 250 MW of behind-the-meter battery storage will assist SMUD with achieving the Zero Carbon Plan goals.

With respect to new technologies and business models, the Zero Carbon Plan focuses on evaluating, prioritizing and scaling the emerging technologies that SMUD expects will have the largest impact on reducing carbon in SMUD’s 2030 resource mix. SMUD is currently focused on various areas of technology and customer-focused programs, including electrification, education, demand flexibility, virtual power plants, vehicle-to-grid technology, and new grid-scale technologies. The Zero Carbon Plan forecasts that customer-owned resources and SMUD customer-focused programs will contribute between 360 and 1,300 MW of capacity to SMUD’s grid by 2030.

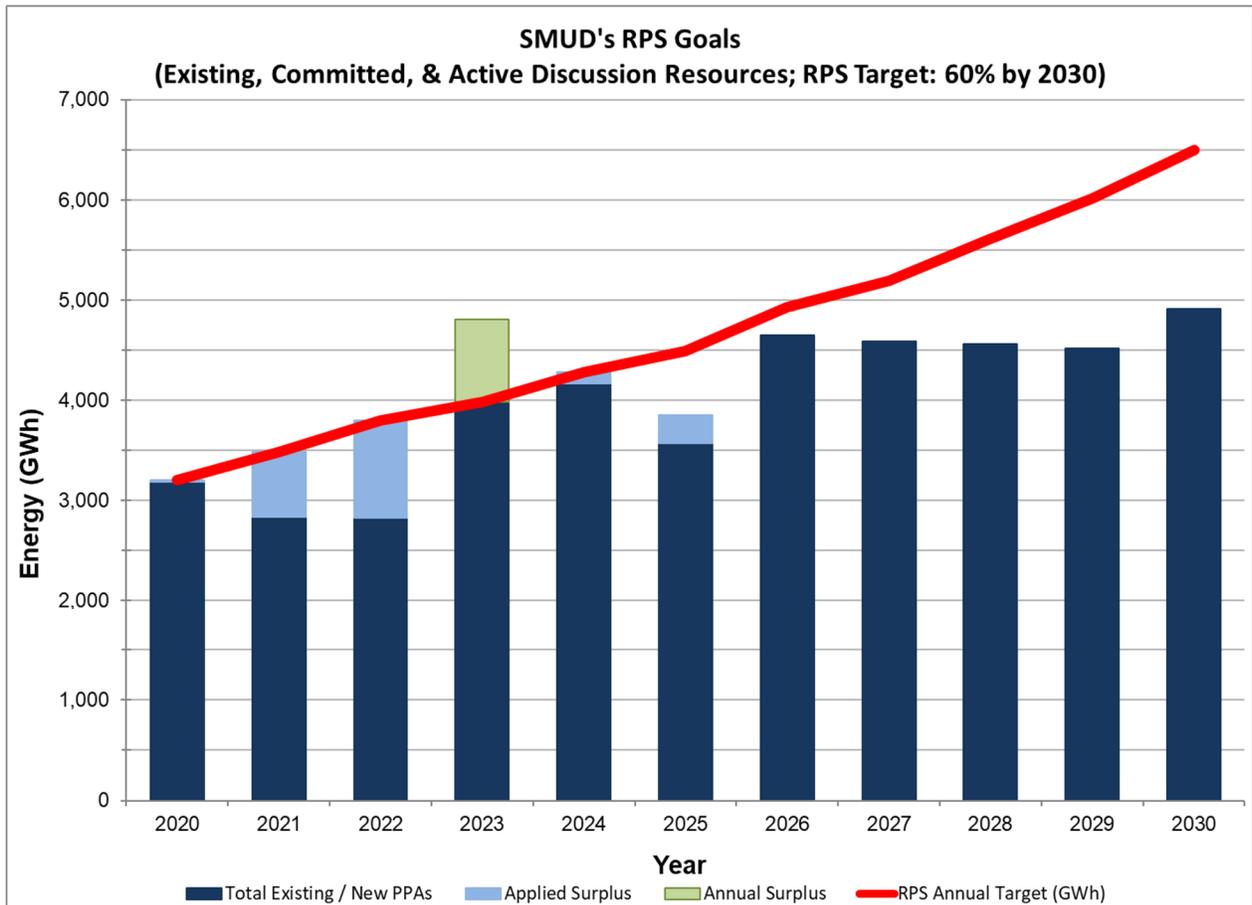
The financial impacts and options focus of the Zero Carbon Plan aims to keep SMUD rate increases at or below the rate of inflation while achieving SMUD’s goal of eliminating carbon emissions from its power supply by 2030. To pay for the expected costs of the Zero Carbon Plan and keep rate increases at or below the rate of inflation, the Zero Carbon Plan estimates the need for SMUD to realize between \$50 million and \$150 million of sustained annual savings. SMUD currently plans to achieve these sustained annual savings by exploring the implementation of operational savings strategies and pursuing partnership and grant opportunities.

While the ultimate impacts of the Zero Carbon Plan on SMUD’s financial results and operations are difficult to predict and are dependent on a variety of factors, such as the relative cost of procuring energy from clean technologies, the availability and relative cost of new technologies, and the adoption and implementation of energy efficiency and other measures by SMUD’s customers, such impacts could be material.

Renewable Energy and Climate Change. The California Renewable Energy Resources Act, established by Senate Bill X1-2 (“SBX1-2”) and the Clean Energy and Pollution Reduction Act of 2015, enacted by Senate Bill 350 (“SB 350”) require that SMUD meets 33% of its retail sales from RPS-eligible renewable resources by 2020 and 50% of its retail sales from RPS-eligible renewable resources by 2030. Senate Bill 100 (“SB 100”), passed by the legislature and approved by then-Governor Brown on September 10, 2018, accelerates the RPS targets and establishes a new 60% target by 2030. The bill also created a planning goal to meet all of the State’s retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Renewables Portfolio Standards*” for a discussion of the State RPS requirements.

SMUD’s compliance with State RPS requirements is evaluated over 3 or 4-year compliance periods. SMUD met the State RPS requirements for the first compliance period (2011-2013) and second compliance period (2014-2016). The third compliance period (2017-2020) required SMUD to source one-third of its energy from renewable resources, and SMUD had sufficient RECs to meet the third compliance period requirements. SMUD filed its 2020 and third compliance period RPS compliance report with the CEC in the second quarter of 2021 and is awaiting verification of its submission from the CEC which is expected to occur by the end of 2023. As of the end of the third compliance period (2020), SMUD had

approximately 1.0 million surplus RECs available to help meet future RPS targets. SMUD expects to file its 2022 RPS compliance report by July 1, 2023, and due to increased load compared to forecast in 2022, and a delayed commercial online date for the NTUA solar project, expects to have provided 34.1% of its retail sales from RPS-eligible renewable resources in 2022, which is less than the interim 2022 RPS target of 38.5%. However, RPS compliance is determined by compliance period and not by individual years and SMUD anticipates that it has sufficient surplus procured and/or under contract resources in 2023 and 2024 to offset the 2022 shortfall. Therefore, SMUD expects to be in compliance with the RPS requirements for the fourth compliance period (2021 – 2024). In addition to meeting RPS standards, SMUD serves an additional 7.3% of its customer load with renewable energy through its voluntary SolarShares and Greenergy pricing programs described above. SMUD estimates that it has sufficient renewable energy deliveries, new power supply contract commitments, new power supply commitments under active discussion, and RPS-eligible surplus carryover to meet its RPS requirements through 2024. Additional resources have been identified in solicitations currently under way that are expected to provide sufficient RPS-eligible resources to cover most of SMUD’s RPS requirements through 2030. Future solicitations are expected to provide the additional resources to fill any remaining gaps. The following chart illustrates SMUD’s current RPS requirements through 2030 and its existing and committed resources, and its resources under active discussion that are expected to be utilized to meet those requirements.



In addition to procuring new sources, meeting the RPS requirements will require replacement of certain existing renewable contracts which expire in future years. While SMUD anticipates it will meet much of its renewable resource requirements through purchase contracts with third parties, it continues to explore additional options, including wind, solar, biomass, and geothermal developments, partnering with other utilities on future projects, and local development options. SMUD's resource forecast (see "POWER SUPPLY AND TRANSMISSION – Projected Resources") accounts for future renewable resources as a component of "Uncommitted Purchases." To meet SMUD's Zero Carbon Plan goals, SMUD anticipates meeting loads in 2030 with approximately 70-80% renewable resources, in addition to hydro and other new zero carbon technologies. See "*– 2030 Zero Carbon Plan*" above.

Given the intermittent nature of power from renewable resources such as wind and solar, SMUD is exploring and investing in options that provide the flexibility to manage the intermittency of such renewable resources. Potential options include energy storage resources, which SMUD has committed to as part of the Zero Carbon Plan, and expanding load management resources. Additionally, on April 3, 2019, SMUD, through its membership in BANC, a joint exercise of powers agency formed in 2009, and currently comprised of SMUD, the Modesto Irrigation District ("MID"), the City of Roseville ("Roseville"), the City of Redding ("Redding"), the City of Shasta Lake and the Trinity Public Utilities District, has commenced its participation in the California Independent System Operator Corporation ("CAISO") western energy imbalance market ("WEIM"). Participation in the WEIM benefits SMUD by providing it with broader access to balancing resources within the region to help manage its expanding renewable portfolio. In addition, other entities within the BANC Balancing Authority Area began participation in the WEIM on March 25, 2021. See "BUSINESS STRATEGY – Serving SMUD's Customers – *Operational Independence and Local Control*" and "POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements."

In 2018, SMUD's Board adopted a new IRP through a comprehensive public process and filed the approved IRP with the CEC on April 29, 2019 pursuant to the CEC's IRP guidelines. The approved IRP calls for a reduction in GHG emissions from SMUD's energy supply by more than 60% by 2030 relative to 1990 levels and a goal of net zero emissions by 2040 due, in part, to a significant investment in electrification of the local building and transportation sectors. The IRP was expected to reduce Sacramento's economy-wide GHG emissions by 70% relative to current levels. SMUD's Zero Carbon Plan, adopted in 2021, built upon the IRP and set a goal of zero carbon emissions by 2030. On September 14, 2022, SMUD submitted an updated IRP filing with the CEC to incorporate the goals set in the Zero Carbon Plan pursuant to the CEC's IRP guidelines. See "BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *2030 Zero Carbon Plan*."

The State's carbon cap-and-trade market established pursuant to Assembly Bill 32 ("AB 32") began in 2013. See "DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Greenhouse Gas Emissions*" for a discussion of AB 32 and the State's cap-and-trade program. SMUD anticipates that allowances allocated to SMUD will nearly equal SMUD's compliance obligations under normal water year conditions. Under low water year conditions, SMUD may need to purchase additional allowances to cover its compliance obligations, including carbon obligations related to wholesale energy sales from SMUD's natural gas power plants. As SMUD implements its clean power goals, SMUD expects its need for these allowances to decline.

There is scientific consensus that increasing concentrations of GHG have caused and will continue to cause a rise in temperatures in the State and around the world. The change in the earth's average atmospheric temperature, generally referred to as "climate change," is, among other things, expected to result in a wide range of changes in climate patterns, including increases in the frequency and severity of extreme weather events, including droughts and heat waves, more frequent incidences of wildfires, changes in wind patterns, sea level rise and flooding, any of which alone or in combination could materially

adversely affect SMUD’s financial results or operations. See also “FACTORS AFFECTING THE REGION” and “OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Other Factors.” As described above, SMUD is actively working to meet its sustainable power supply goals, reduce its own GHG emissions, and assist the local governments in the territory it serves with their desired GHG reductions. In 2016, SMUD introduced the Pilot Natural Refrigerant Incentive Program, its first customer program providing incentives for GHG reduction in addition to kWh savings. SMUD is a founding member and active participant in the Capital Region Climate Readiness Collaborative, a public private partnership formed to better understand and plan for climate impacts expected in the region. SMUD is also an active member of the United States Department of Energy (the “DOE”) Partnership for Energy Sector Climate Resilience. SMUD regularly reviews scientific findings related to climate change and in 2016 published its Climate Readiness Assessment and Action Plan. In 2024, SMUD is planning to update the Climate Readiness Assessment and Action Plan along with other climate resiliency actions.

Energy Storage Systems. Assembly Bill 2514 (“AB 2514”) requires the Board to re-evaluate energy storage goals every three years. In compliance with AB 2514, the Board established a target of 9 MW of energy storage procurement by December 31, 2020, which SMUD has procured. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Energy Storage Systems*” for further discussion of AB 2514. In September 2020, the Board directed that energy storage forecasts be implemented through SMUD’s IRP process going forward. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*” above for a discussion of SMUD’s IRP. SMUD is also evaluating how to couple utility-scale solar with utility-scale storage to support future system reliability needs and renewable energy goals.

Meeting Peak Load. A significant consideration for SMUD will be how it addresses its system peak load. SMUD has implemented programs and tools, such as advanced metering, energy efficiency options, and TOD rates for residential customers, to help customers manage their costs while helping SMUD reduce its peak load. Analysis of 2021 data showed a reduction of approximately 115 MW, weather adjusted, for residential customers during the TOD peak period (5-8 p.m. local time). SMUD staff will continue to monitor the progress and results of the implementation of TOD rates and will use this information to inform future rate actions and load forecasts. See “BUSINESS STRATEGY – Serving SMUD’s Customers – *Time-of-Day Rates.*”

On September 16, 2021, the Board approved an optional residential Critical Peak Pricing rate (the “Peak Pricing Rate”), which went into effect June 1, 2022. The Peak Pricing Rate is designed to reduce load by increasing the price of energy when the grid is most impacted, up to 50 hours per summer. In exchange, customers on the rate will receive a per kWh discount on summer Off-Peak and Mid-Peak rates. SMUD is also exploring the use of more distributed energy resources and demand response programs that could further reduce SMUD’s system peak.

Operational Independence and Local Control. A key component of SMUD’s business strategy is focused on maintaining its independence in operating and maintaining its resources. As such, SMUD has taken a number of actions to mitigate the potential impacts of various federal and state regulatory actions. For example, in 2002 SMUD established itself as an independent control area (now termed “Balancing Authority”) within the Western Electricity Coordinating Council (“WECC”) region. By removing itself from CAISO’s Balancing Authority area, SMUD became responsible for balancing electric supply and demand within its own service territory. This move substantially reduced fees paid to CAISO, preserved operational flexibility and helped to insulate SMUD from the uncertain regulatory environment and tariff structure of CAISO. In addition to decreased financial risks, this independence also reduced SMUD’s exposure to the impacts of capacity and energy shortages in the CAISO Balancing Authority area. Further, as an independent Balancing Authority, SMUD continued to support the statewide electric grid in events of electrical emergencies requiring rotating outages, such as loss of major transmission lines or equipment,

as provided in the statewide emergency plan. By 2006, the SMUD Balancing Authority footprint expanded north to the California-Oregon border and south to Modesto, to include the service areas of the WAPA, MID, Redding and Roseville, and TANC -owned 340-mile 500-kV California-Oregon Transmission Project (“COTP”). In October 2009, SMUD, with the coordination and cooperation of WAPA, joined the Western Power Pool Reserve Sharing Group, which supports reliability and reduces operating costs. In May 2011, BANC assumed the role of the Balancing Authority, though SMUD continues to oversee operation of the grid on behalf of BANC. BANC members share cost responsibility for balancing authority-related compliance obligations, liabilities, and operations. BANC also serves as an important venue for SMUD and other BANC members to collaborate with respect to operational and market improvements inside the BANC footprint and to preserve their operational independence. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.” On April 3, 2019, SMUD, through its participation in BANC, began operating in the CAISO WEIM, which helps SMUD better manage the integration of renewable energy resources. The CAISO WEIM is a voluntary market, which allows SMUD to maintain its operational independence from the CAISO, while providing SMUD greater access to balancing resources throughout the western region. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.”

FERC Order 1000. In 2011, the Federal Energy Regulatory Commission (“FERC”) issued Order 1000, which mandates regional transmission planning and imposes a regional cost allocation methodology for transmission facilities. FERC states that it has the authority to allocate costs to beneficiaries of transmission services even in the absence of a contractual relationship between the owner of the transmission facilities and the beneficiary. Despite appeals challenging FERC’s authority on a number of grounds, the D.C. Circuit Court of Appeals upheld Order 1000. See “DEVELOPMENTS IN THE ENERGY MARKETS – Federal Legislation and Regulatory Proceedings – *Federal Regulation of Transmission Access.*” Nevertheless, there remains flexibility with respect to SMUD’s participation in regional transmission planning. Specifically, SMUD is voluntarily participating as a Coordinating Transmission Owner (“CTO”) in the WestConnect transmission planning organization, and will rely on its WestConnect membership to keep it Order 1000 compliant. While SMUD opposes any cost allocation methodology that would obligate SMUD to pay for facilities that it does not use or need to maintain reliable operations or serve its load, the FERC-approved WestConnect planning process does provide a CTO the option to not accept an allocation of costs. WestConnect is composed of utility companies providing transmission of electricity in a portion of the western United States, working collaboratively to assess stakeholder and market needs and develop cost-effective enhancements to the western wholesale electricity market. SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD’s electric system or the electric industry generally.

Electricity, Natural Gas, and Related Hedging

SMUD continues to utilize a comprehensive and integrated power and fuel supply strategy to acquire a reliable and diversified portfolio of resources to meet existing and future needs. This strategy includes a combination of both physical supply and financial hedging transactions to reduce price risk exposure over a five-year horizon. SMUD’s physical supply arrangements include ownership of power generating resources, as well as a diversified portfolio of power and fuel supply purchase contracts that range in duration, with a mixture of fixed and variable pricing terms.

With regard to the power purchase contracts, SMUD has entered into a series of contracts for the purchase of electricity to supply the portion of its resource needs not already provided by owned resources. SMUD also actively manages its exposure on variable rate electricity purchases, and at times may enter into financial contracts to fix prices by using options to reduce price risk, in each case when warranted by economic conditions. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements.”

With regard to fuel supply contracts, SMUD utilizes a similar strategy of employing financial contracts of various durations to hedge its variable rate fuel supply contracts. As of March 31, 2023, these contracts are forecasted to have hedged the price exposure on approximately 83%, 66% and 55% of SMUD’s anticipated natural gas requirements for 2023, 2024 and 2025, respectively. While the financial effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted. See “POWER SUPPLY AND TRANSMISSION – Fuel Supply – *Supply*.”

As provided in SMUD’s natural gas contracts, SMUD may be required to post collateral to various counterparties. As of March 28, 2023, SMUD did not have any collateral posting obligations. A decrease in natural gas prices could result in a collateral posting by SMUD. While the posting of collateral is not an expense for SMUD, it does temporarily encumber unrestricted cash balances.

To hedge against hydroelectric production volatility of SMUD-owned hydroelectric facilities, SMUD implemented a pass-through rate component called the Hydro Generation Adjustment (the “HGA”). The HGA and the associated Hydro Rate Stabilization Fund (the “HRSF”) help to offset increased power supply or fuel supply costs in years where precipitation levels at SMUD-owned hydroelectric facilities are low. To hedge against variations in the volume of energy received from non-SMUD-owned hydroelectric resources, SMUD uses a rate stabilization fund to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

Managing Risks

SMUD maintains an Enterprise Risk Management (“ERM”) program, a strategic approach to managing enterprise-wide risks as a portfolio, to help reduce the chance of loss, create greater financial stability and protect SMUD resources. It is designed to maintain an early warning system to monitor changes in, and the emergence of, risks that affect the organization’s business objectives. Under the purview of the Enterprise Risk Oversight Committee, composed of executive members and chaired by the Chief Financial Officer, ERM conducts ongoing risk identification, assessments, monitoring, mitigation, risk-based budgeting and reporting. To ensure accountability and oversight, each identified risk is assigned to an executive-level risk owner. Risk status and mitigation efforts are reported monthly to the Board.

Competitive Challenges

In the coming decade, utilities like SMUD may face competition from companies in other industries looking to diversify into the energy sector. Examples of developing competitive areas include retail sale of electricity, distributed electric storage resources, renewable distributed generation (mostly solar in Sacramento), customer installation of fuel cells, third-party electric vehicle charging, home or business automation that enables greater customer participation in energy markets, and third-party provision of energy management software and solutions.

SMUD has a wide range of initiatives to monitor and adapt to changing market conditions and new industry participants. Key areas of focus include:

- Enhancing customer experience. Recognizing the importance of meeting customer expectations, SMUD introduced the Customer Experience Strategy in 2016 to provide customers “value for what they pay” and further strengthen customer loyalty. The initiative is focused on ensuring SMUD has the people, systems, technology, programs and services to consistently meet or exceed customers’ changing expectations. The customer experience is measured via surveys with the goal of achieving 80% of customers agreeing that SMUD provides them with value for what they pay by 2030.

- Restructuring electric rates. In 2017, the Board approved TOD rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018, and the full transition was completed in the fourth quarter of 2019. All of SMUD’s business customers are also on time-based rates. In 2019, the Board approved a restructuring of commercial rates to collect a greater portion of fixed costs through fixed charges and to better align time periods and prices with energy markets. The commercial rate restructuring was delayed by one year due to the impacts of the COVID-19 pandemic. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges” and “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”
- Ongoing integrated resource planning. SMUD monitors and updates its integrated resource planning to ensure future sources of energy balance cost, reliability and environmental requirements with the flexibility to meet challenges of changing market and regulatory conditions, customer energy resources, and emerging technologies.

Leveraging Core Competencies

In addition to these initiatives, SMUD is leveraging core competencies to improve industry safety and help communities serve their customers’ energy needs.

Sacramento Power Academy. SMUD is leveraging its significant experience in training skilled line-workers with the opening of the SMUD Power Academy regional training center in 2016. The academy currently emphasizes training for public power, customer-owned utility employees. There are currently approximately 2,000 customer-owned utilities in the United States that are similar to SMUD, many of which may not have the resources to adequately train their employees. In addition to line-workers, the center will also train substation and network electricians. Other future plans include training electrical, telecom and meter technicians; engineers and designers; construction management inspectors; equipment operators; cable splicers and locators; and support staff.

Community Energy Services. In 2002, Assembly Bill 117 was passed to establish Community Choice Aggregation in the State by authorizing Community Choice Aggregators (“CCAs”) to aggregate customer electric load and purchase electricity for customers. SMUD’s Community Energy Services department was established in 2017 to support organizations with values closely aligned with SMUD’s values, while also generating additional revenue for SMUD. CCA programs are proliferating in the State thanks to support for expanding renewable energy use and desire for local control particularly for electricity procurement. There are numerous CCAs operating in the State, and more are anticipated to launch in the future. CCAs are responsible for procuring wholesale power, setting the generation rate, and staffing a call center to handle opt-outs and questions about the power portfolio. The local investor-owned utility (“IOU”) continues to deliver electricity from the electric grid, maintain its electric infrastructure, bill customers and collect payments.

In October 2017, SMUD was selected by the governing board of Valley Clean Energy (“VCE”) to provide technical, energy and support services, including data management and call center services, wholesale energy services, and business operations support, to VCE for a five-year term [expiring May 31, 2023. SMUD and VCE are currently negotiating a new contract.] VCE is a joint powers agency formed in 2016 by the City of Woodland, the City of Davis and Yolo County to implement a local CCA program. The service territory expanded to include the City of Winters in 2021. The mission of VCE is to deliver cost-competitive clean electricity, product choice, price stability, energy efficiency, and greenhouse gas emissions reductions to its customers in Yolo County. VCE began electric services to its customers in the summer of 2018, giving Yolo County residents a choice between two electricity providers, VCE and PG&E.

In November 2017, SMUD was selected by the governing board of East Bay Community Energy (“EBCE”) to provide call center and data management services for a three-year term beginning in January 2018. SMUD signed a new contract with EBCE in January 2022 for call center and data management services for an additional three-year term. EBCE is a joint powers agency formed in 2016 by the cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, Piedmont, San Leandro and Union City in Alameda County to implement a local CCA program. EBCE expanded its territory to the cities of Pleasanton, Newark, and Tracy in April 2021.

In June 2019, SMUD was selected by the governing board of Silicon Valley Clean Energy (“SVCE”) to provide program services to help local SVCE communities reduce carbon pollution while delivering engaging customer experiences. SVCE programs are focused on grid integration, as well as electrifying transportation, buildings and homes. SVCE is a joint powers agency formed in 2016 by the cities of Campbell, Cupertino, Gilroy, Lost Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County to implement a local CCA program.

In July 2022, SMUD was selected by the governing board of Marin Clean Energy (“MCE”) to provide data management, billing, data analytic and system assessment services to MCE. MCE is a joint powers agency formed in 2010 and represents 37 member communities across four Bay Area counties: Contra Costa, Marin, Napa and Solano.

In September 2022, SMUD was selected by the governing board of Sonoma Clean Power (“SCP”) to provide market research services to SCP. SCP is a joint powers agency that serves Sonoma and Mendocino counties.

While CCAs have had success in the State, they are susceptible to business, regulatory and other risks that could lead to a financial loss and/or result in a cessation of operations for the CCA. These risks could extend to a CCA’s counterparties, including SMUD. SMUD has made an effort to identify and mitigate potential counterparty risks to the extent possible in service agreements with the CCAs described above. SMUD may pursue opportunities to provide similar services to additional CCAs in the future. SMUD management does not expect its current arrangements to have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

FACTORS AFFECTING THE REGION

Precipitation Variability

SMUD uses a National Weather Service precipitation station located at Pacific House, California to approximate available water supply to SMUD’s Upper American River Project (the “UARP”) hydropower reservoirs. As of March 31, 2023, precipitation at Pacific House, California totaled 77 inches for the October-September hydropower water supply period. This is 185% of the 50-year rolling median of 42 inches. Total reservoir storage in the UARP hydropower reservoirs was 269 [TAF] as of April 18, 2023, which was about 71% of capacity, approximately 8% below the historical average for this date to accommodate snowpack which was 156% of normal. SMUD manages its reservoirs to maximize water storage going into the summer season, which preserves generating capacity during SMUD’s high load months and ensures that SMUD meets its UARP FERC license requirements, including requirements for recreational and environmental flows.

There can be wide swings in precipitation from year to year. In years with below average rainfall, SMUD may have to generate or purchase replacement energy at additional cost. To hedge against variations in the volume of energy received from SMUD-owned UARP hydroelectric resources, SMUD uses the

HRSF to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

SMUD is also exposed to precipitation variability through its contract with the WAPA. In an average water year this contract provides roughly 661 gigawatt hours (“GWh”) of power. WAPA’s actual deliveries are based on hydroelectric generation (minus energy use for pumping) at Central Valley Project reservoirs in Northern California, which varies based on annual precipitation patterns, water deliveries for agriculture, and flow requirements in the Sacramento-San Joaquin River Delta. Unlike the UARP, SMUD does not monitor precipitation stations to approximate power deliveries under the WAPA contract, and instead relies on a forecast of power deliveries from WAPA. As of March 31, 2023, WAPA has forecasted power deliveries of 451 GWh for 2023, down approximately 32% less than an average water year. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – *Western Area Power Administration.*”

Wildfires

General. Wildfires in the State have become increasingly common and destructive. Frequent drought conditions and unseasonably warm temperatures have increased, and could further increase, the possibility of wildfires occurring in areas where SMUD maintains generation, transmission and distribution facilities. The number of diseased and dead trees has increased, and could further increase, this possibility. As a result, SMUD faces an increased risk that it may be required to pay for wildfire related property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits), or may be disputed by insurers, and could be material. In addition, a significant fire or fires in SMUD’s generation, transmission or service area could result in damage or destruction to SMUD’s facilities, result in a temporary or permanent loss of customers or otherwise materially increase SMUD’s costs or materially adversely affect SMUD’s ability to operate its Electric System or generate revenues.

SMUD’s service territory is located within Sacramento County, which is located outside the California Public Utilities Commission (the “CPUC”) high fire threat areas established in 2018. However, as described below, SMUD’s UARP facilities and certain of SMUD’s and TANC’s transmission facilities are within CPUC high fire threat areas. In addition, as described below, certain portions of SMUD’s service territory are located within the California Department of Forestry and Fire Protection (“Cal Fire”) Fire Protection and Resource Assessment Program (“FRAP”) Moderate, High and Very High Fire Hazard Severity Zones. SMUD’s exposure to liability for damages related to its UARP facilities, which are located within high fire threat areas in El Dorado County, is reduced due to risk mitigation measures adopted by SMUD and the low number of inhabitants and structures near the UARP facilities (See “Wildfire Mitigation” below). SMUD continues to take responsible action to minimize its exposure to liability from wildfires; however, under current State law, utilities can be held liable for damages caused by wildfires sparked by their equipment or other facilities regardless of whether the utility was negligent or otherwise at fault. Therefore, at this time the full extent of SMUD’s potential exposure to wildfire risk is unknown.

Distribution (SMUD Service Territory). State law requires Cal Fire to classify areas in the State based on the severity of the fire hazard that is expected to prevail there. These areas or “Fire Hazard Severity Zones” are based on factors such as fuel (material that can burn), slope and the expected chance of burning. There are three Fire Hazard Severity Zones (Moderate, High and Very High) based on increasing fire hazard. Portions of SMUD’s service territory are located within these Fire Hazard Severity Zones. SMUD has assessed its service territory based on Cal Fire’s FRAP map, adopted in 2007; the following table illustrates SMUD’s assessment of the approximate extent of its service territory and retail customer base located within the three Fire Hazard Severity Zones.

Fire Hazard Severity Zone	Moderate	High	Very High
Acres of SMUD Service Area	231,816	2,337	1,061
% of Total SMUD Service Area	40.6%	0.4%	0.2%
Number of Retail Customers	53,621	4,285	148
% of Total Retail Customers	7.7%	0.6%	0.0%

Transmission (Outside of SMUD Service Territory). In 2018, the CPUC approved a new statewide fire map that identifies areas of elevated and extreme wildfire risk from utility-associated assets located throughout the State. SMUD directly participated in the development of the CPUC’s statewide fire map. In connection with the development of the CPUC’s statewide fire map, a peer review and a team of independent nationwide experts led by Cal Fire affirmed that SMUD’s electric service area is properly located outside of these elevated (“Tier 2”) and extreme (“Tier 3”) high fire threat areas; however, SMUD’s UARP facilities are located within both Tier 2 and Tier 3 areas. According to the CPUC, Tier 2 fire-threat areas are areas where there is an elevated wildfire risk from utility assets and Tier 3 fire-threat areas are areas where there is an extreme risk from utility assets. As of June 8, 2021, approximately 37 right-of-way miles of SMUD’s transmission lines are in Tier 2 fire-threat areas and approximately 19 right-of-way miles of SMUD’s transmission lines are in Tier 3 fire-threat areas. SMUD is also a member of TANC. As of July 2022, approximately 116.3 right-of-way miles of TANC’s transmission lines are in Tier 2 fire-threat areas and approximately 4.5 right-of-way miles of TANC’s transmission lines are in Tier 3 fire-threat areas. In accordance with its FERC license, SMUD adheres to a FERC-approved Fire Prevention and Response Plan for its UARP facilities. On May 17, 2018, in accordance with State law, SMUD’s Board of Directors determined that the UARP area may have a “significant risk of catastrophic wildfire” resulting from overhead electric facilities and that SMUD’s FERC-approved UARP Fire Prevention and Response Plan meets requirements for presenting wildfire mitigation measures to the Board for its approval.

Wildfire Mitigation. In response to potential wildfire risk, SMUD has implemented and is continuing to implement a series of measures intended to prevent wildfires from occurring, minimize the spread of any fire that does occur and improve the resiliency of its system. These measures include an increase in the degree of sophistication of fuel reduction inside and adjacent to rights-of-ways; installation of Cal Fire-approved exempt material to reduce the risk of sparking; enhanced inspection and maintenance programs; increased use of ignition-resistant construction, including covered conductors and undergrounding of conductors; increased monitoring of and identified responses to fire conditions, including operational procedures for the de-energization of lines during high fire conditions; and elimination of automatic reclosers on SMUD’s transmission lines and on SMUD’s distribution lines in certain areas during fire season.

SMUD’s proactive approach to vegetation management recently has been expanded to include the use of advanced technologies such as Light Detection and Ranging (“LIDAR”) surveys, ortho and oblique that is used to pinpoint tree health and/or condition that may not yet be visible to the naked eye. In addition, SMUD has installed additional weather stations in transmission corridors and substations for increased situational awareness and has continued coordination and collaboration with local agencies and first responders as well as vulnerable populations.

State legislation enacted in 2018 and 2019 (SB 901 and AB 1054, respectively) requires publicly owned utilities (“POUs”) to prepare and present Wildfire Mitigation Plans to their governing boards by January 1, 2020, and annually thereafter. SMUD assembled an enterprise-wide team of subject-matter experts to prepare its plan in compliance with this legislation. SMUD’s initial Wildfire Mitigation Plan (“WMP”) was adopted by the Board in the fourth quarter of 2019, after circulation for public comment and

review of the comprehensiveness of the plan by a qualified independent evaluator. The WMP and evaluator's report were submitted to the State Wildfire Safety Advisory Board (the "WSAB") in 2020. The WSAB was established pursuant to AB 1054 and is charged, among other things, with providing comments and advisory opinions relating to content and sufficiency of POU wildfire mitigation plans and recommendations on how to mitigate wildfire risk.

SMUD reviews its WMP each year, presenting the updated plan to the Board for adoption at duly noticed public meetings. The updated plans and evaluator reports are submitted to the WSAB for advisory opinion and recommendations. SMUD responds to the WSAB's comments regarding SMUD's Wildfire Mitigation Plan as part of its WMP process. SMUD will continue to annually review and update its WMP, conducting a comprehensive review at least every third year.

[SMUD is currently conducting a comprehensive review and update of its WMP and anticipates presenting its 2023-2025 WMP to the Board in second quarter of 2023, after soliciting public input and independent evaluation.]

Wildfire Insurance. Wildfires in the State have not only increased potential liability for utilities, but have also adversely impacted the insurance markets, leading to higher costs for coverage; coverages becoming prohibitively expensive; limited or restricted coverage to certain types of risks; or coverage at insufficient levels. SMUD most recently renewed its general and wildfire liability insurance coverage on June 15, 2022. SMUD increased the commercially-insured portion of its \$255 million wildfire coverage program from \$176 million to \$192.5 million and reduced the self-insured layers and quota share portions of the insurance tower down to \$62.5 million.

In addition, it is expected that SMUD will have a portion of the \$400 million aggregate principal amount of its commercial paper and line of credit program to provide operational flexibility in the event of the occurrence of a wildfire or other operational event. However, SMUD has not covenanted to maintain the availability of the commercial paper program and line of credit program for these purposes and no assurances can be given that the commercial paper and line of credit program will be available at the time of, or during, such an event.

August 2020 Heat Wave

The State experienced a period of prolonged above average temperatures from August 14, 2020 through August 18, 2020. The CAISO was forced to institute rotating electricity outages in the State during this extreme heat wave. SMUD, as a member of BANC, did not have to implement any planned power disruptions. Additionally, SMUD was able to support the CAISO during some hours of the heat wave with both requested emergency assistance and wholesale market sales. SMUD's peak demand between August 14, 2020 and August 18, 2020, varied between 2,874 MW and 3,057 MW, well below SMUD's record peak of 3,299 MW.

September 2022 Heat Wave

The State experienced a period of prolonged above average temperatures from September 5, 2022 through September 8, 2022. On September 6, 2022, SMUD experienced its second highest peak demand of 3,292 MW. SMUD did not have to implement any planned power disruptions.

Storm Damage

In January 2023, SMUD experienced a series of winter storms that brought heavy rains and high winds causing damage to SMUD's grid and widespread outages for SMUD's customers. By the time the

storm response was complete, SMUD had experienced the largest mobilization of personnel and restoration crews in its history. SMUD incurred costs related to removing downed trees, restoring power from downed poles and broken lines, replenishing inventory, communicating with and providing assistance to customers, maintaining IT systems, and coordinating with local emergency agencies. SMUD is pursuing claims with Federal and State agencies. SMUD currently cannot predict financial impacts from the storm damage however such impacts may be material.

Cosumnes Power Plant Outage

On June 5, 2022, the Cosumnes Power Plant was shut down due to a ground fault in the Steam Turbine Generator (“STG”) stator. The ground fault was caused by delamination of insulation of the through bolt. Damage from the ground fault resulted in a rewind and restack of the stator core, replacement of all stator through bolts, and a full rewind of turbine rotor. The Cosumnes Power Plant repairs were completed in February 2023 and the plant returned to service on March 5, 2023. During the extended outage, SMUD shifted generation to the other Local Gas-Fired Plants and the Sutter Energy Center and procured additional energy and resource adequacy capacity. SMUD also requested and received approval from the California Air Quality Board and California Energy Commission to operate one or both of the gas turbines without the STG. During the September 2022 heatwave, both of the gas turbines at the Cosumnes Power Plant were operated without the STG, providing 270 MW at peak.

To mitigate the financial impact of unplanned outages from its thermal assets, SMUD carries commercial property insurance with a business interruption endorsement that can provide up to \$30.8 million of claims recovery per month, with a sub-limit of \$310 million over any 18-month period. Business interruption claims are subject to a 60-day waiting period. SMUD has begun the property damage and business interruption insurance claim process and received a \$50 million advance in December 2022. SMUD is reviewing and submitting claim expenses and expects to reach claim settlement in the third quarter of 2023. The settlement amount is unknown but is expected to be material.

Impacts from COVID-19 Pandemic

While the impact of the COVID-19 pandemic on SMUD has lessened since the height of the pandemic in 2020, SMUD is still experiencing impacts from the pandemic. Compared to weather adjusted load levels, SMUD’s overall load is near or above pre-pandemic levels. Compared to pre-pandemic loads, residential customer load remains higher and commercial customer load has almost recovered. SMUD anticipates that commercial customer load recovery will continue over the next couple of years resulting in continued movement towards pre-pandemic levels, but not a complete recovery as people continue to work from home long-term.

Part of the governmental response to the economic consequences of the pandemic required utility providers (including SMUD) to provide additional grace periods and flexible payment plans for the payment of utility bills or to refrain from pursuing collection remedies for unpaid bills for a period of time. SMUD also implemented a no-shutoff policy through January 2022 under which SMUD did not disconnect power to a customer for non-payment of its electric bill. Beginning in February 2022, SMUD resumed its normal payment, late fee, and disconnection process and began disconnections of unpaid accounts in late April 2022. As a result, SMUD has experienced an increase in delinquencies for customer electric accounts versus pre-pandemic levels. In December 2021, SMUD received \$41 million from the California Arrearage Payment Program (“CAPP”) initial funding, and an additional \$9.9 million in 2022. All funds were applied to delinquent balances. As of March 31, 2023, the total delinquencies for customer electric accounts were \$50.8 million, after the CAPP credit, which is an increase from the February 2020 balance of total delinquencies for customer electric accounts of \$16.9 million.

SMUD also paused the recertification process for existing customers in SMUD’s low-income discount program during the pandemic. The number of customers participating in the low-income assistance program increased by 19,775, or approximately 26% from February 2020 to February 2023. SMUD has resumed the recertification process for existing customers in the low-income discount program in 2023.

While the impacts of the COVID-19 pandemic on SMUD have lessened, if the pandemic and its consequences again become more severe or another similar event occurs, the impacts on SMUD’s financial results and operations could be material.

RATES AND CUSTOMER BASE

Rates and Charges

SMUD’s Board of Directors has autonomous authority to establish the rates charged for all SMUD services. Unlike IOUs and some other municipal utility systems, retail rate and revenue levels are not subject to review or regulation by any other federal, State or local governmental agencies. Changes to SMUD rates only require formal action by the Board of Directors after two public workshops and a public hearing. SMUD is not required by law to transfer any portion of its collections from customers to any local government. SMUD typically reviews and sets rates on a two-year cycle.

2019 Rate Action.

On June 24, 2019, the Board approved a 3.75% rate increase effective January 1, 2020, a 3.00% rate increase effective October 1, 2020, a 2.50% rate increase effective January 1, 2021, and a 2.00% rate increase effective October 1, 2021, for all customer classes. Additionally, the Board approved a restructuring of the commercial rates, including new time periods and an overall increase in the fixed bill components, such as the System Infrastructure Fixed Charge and demand charges, and a corresponding decrease in energy charges, making the restructuring revenue neutral by rate category. To minimize bill impacts, rate categories will be restructured over an 8-year period. Due to the impacts of the COVID-19 pandemic on SMUD’s operations and priorities, on August 20, 2020, the Board approved postponing the implementation of the commercial rate restructure for one year. Customers were transitioned to the new rates in the first quarter of 2022. There is currently pending litigation concerning the adoption of the 2020 and 2021 rates. See “LEGAL PROCEEDINGS – Proposition 26 Lawsuit.”

2021 Rate Action.

On September 16, 2021, the Board approved a 1.5% rate increase effective March 1, 2022 and a 2.0% rate increase effective January 1, 2023 for all customer classes. Additionally, the Board approved the Solar and Storage Rate, the optional residential Peak Pricing Rate, and updates to certain schedules of SMUD’s Open Access Transmission Tariff (“OATT”). The Board also approved a new timeline for the commercial rate restructure transition, and all impacted commercial customers were transitioned to the new rates by the end of the first quarter of 2022.

SMUD also implemented a solar interconnection fee based on the size of solar interconnection and supporting programs such as battery incentives, incentives to enroll in SMUD’s Peak Pricing Rate, battery incentives for Virtual Power Plants, and a program to bring the benefits of solar to under-resourced multi-family communities. These programs and fees are not subject to Board approval.

Rate Stabilization Funds

The Rate Stabilization Fund (the “RSF”) is maintained by SMUD to reduce the need for future rate increases when costs exceed existing rates. At the direction of the Board, amounts may be either transferred into the RSF (which reduces revenues) or transferred out of the RSF (which increases revenues). The Board authorizes RSF transfers on an event driven basis. The RSF includes funds to hedge variations in the volume of energy received from WAPA hydroelectric generation, variation in AB 32 revenue and variations in Low Carbon Fuel Credit (“LCFS”) revenue. As of April, 2023, the balance in the RSF was \$120.1 million, which is approximately 7.3% of annual retail revenue.

Effective July 2008, SMUD implemented the HGA, which is a pass-through rate component to deal with variations in hydroelectric generation from the UARP (see “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Hydroelectric*”). The HGA is designed to increase revenues in dry years when SMUD must buy power to replace hydroelectric generation and return money to the HRSF in wet years when SMUD has more hydroelectric generation than expected. Each year SMUD determines the impact of precipitation variances on projected hydroelectric generation from the UARP. When the precipitation variance results in a deficiency of hydroelectric generation from the UARP, transfers from the HRSF, which was created as a component of the RSF, to SMUD’s available cash, will be made in an amount approximating the cost to SMUD of replacement power (up to 4% of revenues) until the balance in the HRSF is zero. When the precipitation variance results in a projected surplus of hydroelectric generation from the UARP, deposits will be made into the HRSF in an amount approximating the positive impact to SMUD from the surplus hydroelectric generation (up to 4% of revenues) until the balance in the HRSF is equal to 6% of budgeted retail revenue. If the balance in the HRSF is not sufficient to cover transfers that would otherwise be made in the event of a projected deficiency in UARP hydroelectric generation, a 12-month HGA surcharge will automatically be included on customers’ electric bills at a level that generates up to 4% of retail revenue. If the balance in the HRSF is equal to 6% of budgeted retail revenue on any precipitation variance calculation date and the precipitation variance results in a projected UARP hydroelectric generation surplus, the positive impact of the surplus may be used for other purposes at staff’s recommendation, with the approval of the Board, including returned to customers through an electric bill discount up to 4% of retail revenue. SMUD calculates HRSF transfers based on an April-March (water year) precipitation period at Pacific House, California. This National Weather Service precipitation station is used to approximate available water supply to SMUD’s UARP hydropower reservoirs. As of March 31, 2023, precipitation at Pacific House, California totaled 90.83 inches which is above the 50-year rolling median of 50.52 inches.

As of April, 2023, the balance in the RSF and HRSF combined was \$216.5 million. SMUD transferred approximately \$65.4 million into of the HRSF from SMUD’s available cash in April 2023 due to above average precipitation, which increased the balance in the HRSF from \$31 million to approximately \$96.4 million. Although the HRSF and the subaccount of the RSF that hedge variations in the volume of energy received from non-SMUD hydroelectric generation currently have positive balances, below average precipitation could deplete the HRSF and RSF balances to zero.

Low Income Discount

As of February 2023, approximately 95,175 customers received the low-income discount offered by SMUD, which represents approximately 17% of all residential customers. SMUD suspended recertification during the pandemic, but continued to monitor the program to ensure participants continue to be eligible for the discount. In 2022, the total discount was approximately \$31.3 million. As a result of the effects of the COVID-19 pandemic and related economic downturn, SMUD experienced an increase in low-income discount applicants. See “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”

SMUD expanded its programs and services starting in 2016 to help customers with energy assistance, home improvement packages and education. SMUD is creating tailored solutions to best meet the needs of low-income customers. These solutions include free solar panels and inspecting homes to identify energy saving and fuel switching opportunities. As of February 2023, SMUD has performed 27,000 energy retrofits and, in partnership with Grid Alternatives (a non-profit organization that focuses on implementing solar power and energy efficiency for low-income families), 196 customers have benefited from free solar installations. Forty-eight additional homes received solar and energy efficiency through a partnership with Habitat for Humanity of Greater Sacramento. As part of SMUD's Zero Carbon Plan and the focus on building electrification, SMUD has also been ramping up electrification investments for low-income customers. Since 2019, SMUD has assisted more than 1,000 households with electrification upgrades.

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Rate Comparisons

SMUD’s rates remain significantly below those of PG&E and other large utilities throughout the State. The following table sets forth the average charges per kWh by customer class for both SMUD and PG&E. PG&E’s rates reflect their recently approved rate increase effective March 1, 2023.

AVERAGE CLASS RATES

	SMUD Rates (cents/kWh)⁽¹⁾	PG&E Rates (cents/kWh)⁽²⁾	Percent SMUD is Below PG&E⁽³⁾
Residential – Standard	17.96¢	36.27¢	50.5%
Residential – Low Income	12.53¢	23.11¢	45.7%
All Residential	17.10¢	30.50¢	44.0%
Small Commercial (Less than 20 kW)	17.39¢	34.55¢	49.7%
Small Commercial (21 to 299 kW)	16.07¢	33.90¢	52.6%
Medium Commercial (300 to 499 kW)	15.01¢	32.39¢	53.6%
Medium Commercial (500 to 999 kW)	14.08¢	28.00¢	49.7%
Large Commercial (Greater than 1,000 kW)	12.03¢	22.12¢	45.6%
Lighting – Traffic Signals	13.77¢	33.94¢	59.4%
Lighting – Street Lighting	15.64¢	46.15¢	66.1%
Agriculture	15.25¢	31.49¢	51.6%
System Average	15.65¢	29.83¢	47.6%

⁽¹⁾ Projected 2023 average prices for SMUD with rates effective January 1, 2023.

⁽²⁾ PG&E average prices in 2023 reflect rates effective March 1, 2023, per Advice Letter 6863-E- dated February 15, 2023.

⁽³⁾ The rates in the Average Class Rates table are calculated by dividing the total revenue of each class by the total usage of that class in kWh. The actual savings per customer will vary based on their electricity consumption.

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The following table shows a comparison of SMUD’s charges for the average residential usage of 750 kWh per month (based on an average of summer and non-summer) and charges of seven similar neighboring or largest utilities in the State.

STATEWIDE COMPARISON–RESIDENTIAL SERVICE

	Monthly Billing Charge 750 kWh⁽¹⁾⁽²⁾	Percent SMUD is (Below)/Above Utility
Sacramento Municipal Utility District	\$131.40	
Pacific Gas & Electric Company	\$282.25	(53%)
Roseville Electric Utility	\$122.47	7%
Turlock Irrigation District	\$123.70	6%
Modesto Irrigation District	\$144.30	(9%)
Los Angeles Dept. of Water & Power	\$169.76	(23%)
Southern California Edison Company	\$273.21	(52%)
San Diego Gas and Electric Company	\$357.12	(63%)

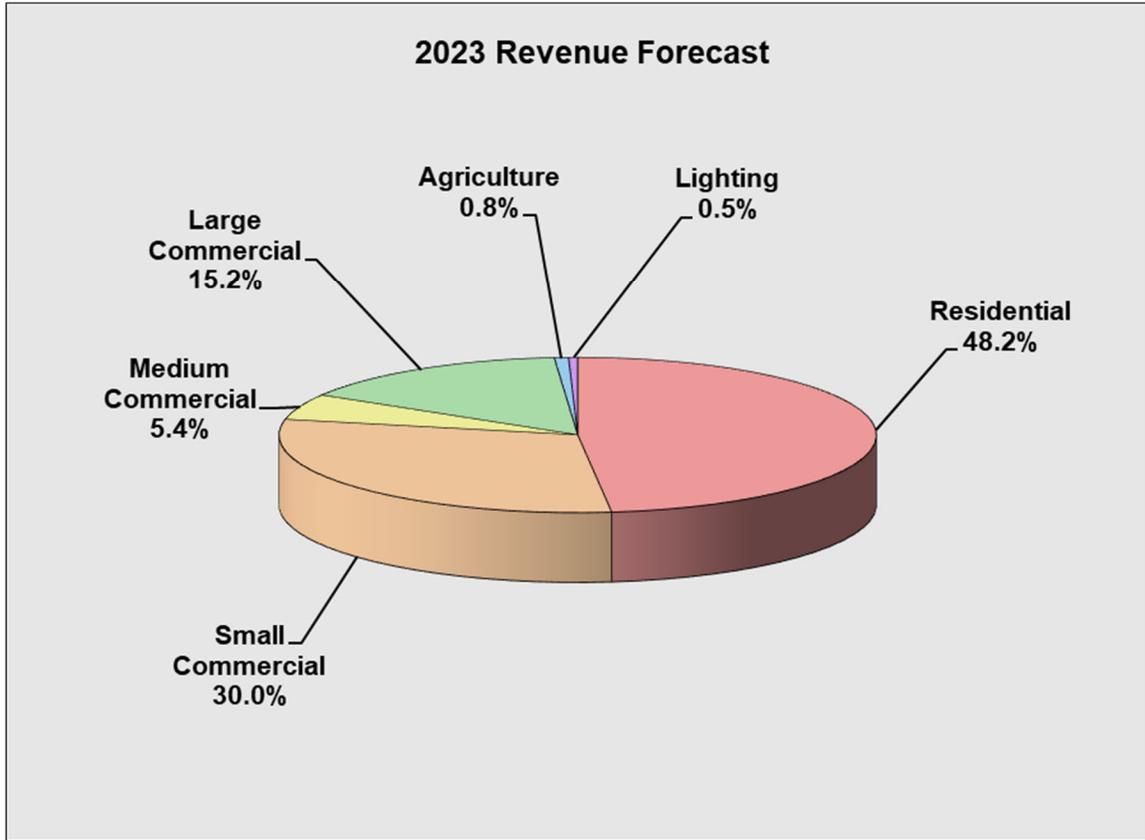
⁽¹⁾ Per individual utility’s published schedules as of March 1, 2023.

⁽²⁾ Average usage of theoretical customer using 750kWh per month.

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Allocation of Revenue by Customer Class

The following chart sets forth the forecast percentage of SMUD revenues from billed sales associated with each customer class.



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Customer Base; Largest Customers

A stabilizing influence on SMUD's revenues is that a substantial proportion is derived from residential customers (48.9% in 2022). Historically, revenue from commercial and industrial consumption has been more sensitive to economic fluctuation. Furthermore, SMUD has no dominant customers that account for a significant percentage of annual revenues. In 2022, no single customer contributed more than 3% of revenues. The top ten customers generated approximately 11% of revenues and the top 30 generated approximately 17%. The following table presents information on SMUD's top ten customers as of December 31, 2022.

SMUD'S LARGEST CUSTOMERS (As of December 31, 2022)

Customer Type	Annual Revenue (\$ millions)	% of Total Revenue
Technology	37.56	2.31%
Government	33.02	2.03%
Government	31.59	1.94%
Government	14.58	0.90%
Government	14.11	0.87%
Communications	9.89	0.61%
Industrial Gases	9.12	0.56%
Government	8.04	0.49%
Grocery	7.37	0.45%
Government	7.29	0.45%
Top 10 Total	172.57	10.59%

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POWER SUPPLY AND TRANSMISSION

Power Supply Resources

The following table sets forth information concerning SMUD’s power supply resources as of March 31, 2023. Capacity availability reflects expected capacities at SMUD’s load center, as well as entitlement, firm allocations and contract amounts in the month of July, which is generally SMUD’s peak month.

POWER SUPPLY RESOURCES (As of March 31, 2023)

Source:	Capacity Available (MW) ⁽¹⁾
Generating Facilities:	
Upper American River Project – Hydroelectric	685
Solano Wind Project – Wind ⁽²⁾	94
Hedge Battery ⁽²⁾	4
Sub-total:	783
Local Gas-Fired Plants:	
Cosumnes Power Plant	570
Carson Project.....	103
Procter & Gamble Project.....	166
McClellan	72
Campbell Soup Project	170
Sub-total:	1,081
Purchased Power:	
Western Area Power Administration (WAPA) ⁽³⁾ ⁽⁴⁾	351
Grady – Wind ⁽²⁾	34
Avangrid (Iberdrola) (PPM) – Wind ⁽²⁾	22
Feed-in-Tariff Photovoltaic – Solar ⁽²⁾	40
Rancho Seco Solar ⁽²⁾	53
NTUA Navajo Drew Solar ⁽²⁾	55
Great Valley – Solar ⁽²⁾	40
Wildflower Solar ⁽²⁾	8
Calpine Geysers – Geothermal	95
CalEnergy – Geothermal	26
Patua (Gradient/Vulcan) – Geothermal.....	12
Other Long-Term Contracts.....	18
ELCC Portfolio Adjustment ⁽²⁾	4
Sutter Calpine Thermal.....	258
Firm Contract Reserves ⁽⁴⁾	18
Committed Short-Term Purchases ⁽⁵⁾	275
Uncommitted Short-Term Purchases	8
Sub-total:	1,314
Total	3,178

⁽¹⁾ Available capacity is the net capacity available to serve SMUD’s system peak load during the month of July.

⁽²⁾ Capacity values shown are based on resource effective load carrying capability modeling.

⁽³⁾ Total includes SMUD’s Base Resource share and WAPA Customer allocations.

⁽⁴⁾ Assumes firm reserves of 5% are included.

⁽⁵⁾ Committed Short-Term Purchases are primarily purchased on a year-ahead to season-ahead basis from various sources.

Note: Totals may not add due to rounding.

Power Generation Facilities

Hydroelectric. The UARP consists of three relatively large storage reservoirs (Union Valley, Loon Lake and Ice House) with an aggregate water storage capacity of approximately 400,000 acre-feet and eight small reservoirs. Project facilities also include eight tunnels with a combined length of over 26 miles and eight powerhouses containing 11 turbines. In addition to providing clean hydroelectric power and operating flexibility for SMUD, the UARP area provides habitat for fish and wildlife and a variety of recreational opportunities, including camping, fishing, boating, hiking, horseback riding, mountain biking and cross-country skiing.

The combined capacity of the UARP is approximately 685 MW at SMUD's load center in Sacramento. Under current licensing and mean water conditions, these facilities are expected to generate approximately 1,600 GWh of electric energy annually, which represents approximately 15% of SMUD's current average annual retail energy requirements. In 1957, the Federal Power Commission (predecessor agency to FERC) issued a license to SMUD for the UARP. This 50-year license was subsequently amended to add and upgrade facilities and now includes all segments of SMUD's hydroelectric facilities located on the South Fork of the American River and its tributaries upstream from the Chili Bar Project (described below). On July 23, 2014, FERC issued to SMUD a new 50-year license for the UARP.

On November 9, 2016 FERC issued an Order authorizing SMUD to construct the South Fork Powerhouse downstream of the UARP's Slab Creek Dam. Construction was substantially completed in the fall of 2020, and the new powerhouse was placed into operation on October 25, 2022, adding 1.8 MW of generation to the UARP's overall capacity.

On June 16, 2021, pursuant to Board authorization, SMUD acquired the Chili Bar Hydroelectric Project which consists of a 7 MW powerhouse, reservoir, dam and spillway, north of Placerville on the South Fork of the American River for approximately \$10.4 million (the "Chili Bar Project"). The Chili Bar Project is immediately downstream from the UARP and operates as the regulating reservoir for the UARP's largest powerhouse. Owning the UARP and the Chili Bar Project enables SMUD to operate the two projects with a holistic approach to license compliance and generation efficiency.

Solano Wind Project. SMUD owns and operates an 87 MW wind project, located in Solano County, known as Solano 2. Solano 2 consist of 29 wind turbine generators ("WTGs") rated at 3 MW each. Energy from the project is collected at 21 kV and transmitted over a dedicated 3-mile overhead system to the SMUD-owned Russell substation. At the Russell facility, the energy is transformed to 230 kV and interconnected to PG&E's Birds Landing Switching Station. Energy deliveries are scheduled through the CAISO.

Solano 3 Project. In 2011 and 2012, SMUD constructed a 128 MW wind project adjacent to Solano Phase 2, known as Solano 3. The Solano 3 project consists of 31 WTGs rated at 1.8 MW and 24 WTGs rated at 3.0 MW. The project interconnects through a 34.5 kV underground collection system to the Russell substation. Like the Solano Phase 2 project, this energy is transformed to 230 kV and delivered through the CAISO.

Solano 4 Project. SMUD is developing the Solano 4 Wind Project on SMUD-owned land near the Solano 3 project, known as the Collinsville and Roberts properties, to install 10 WTGs rated at 4.5 MW, and to remove the Solano 1 turbines and replace them with 9 WTGs rated at 4.5 MW. SMUD received the Cluster II Phase I Study results from the CAISO in January 2019, provided the initial security posting in April 2019, and received the Phase II Study Report in November 2019, furthering the process towards a Large Generator Interconnection Agreement ("LGIA"). SMUD has met all of the CAISO requirements and has executed a LGIA as of June 2021 that will allow for 90.8 MW of capacity at the point of

interconnection. WAPA and PG&E identified upgrades needed to interconnect the Solano 4 Wind Project that may not be complete before 2024. The WAPA impacts have been resolved at no cost. PG&E has an approved project and expects to complete the needed upgrades by May of 2025. In April 2021, SMUD submitted an application for advisory review by the Solano County Airport Land Use Commission (the “Solano ALUC”) of the Solano 4 Wind Project’s consistency with the 2015 Travis Air Force Base Land Use Compatibility Plan (the “Travis Plan”). In May 2021, the Solano ALUC purported to resolve that the Solano 4 Wind Project was inconsistent with the Travis Plan. In August 2021, the Board approved the Project Environmental Impact Report, made findings overriding the Solano ALUC’s finding of inconsistency, made findings there was no alternative to the project, and approved the Solano 4 Wind Project. In September 2021, Solano County filed a writ petition challenging SMUD’s approval of the Solano 4 Wind Project based on procedural environmental, zoning and land use grounds. The parties entered into a settlement agreement on December 14, 2022, and the suit was dismissed on January 10, 2023. The settlement agreement allows for the construction of the Solano 4 Wind Project as planned.

In addition, SMUD applied for and obtained extensions of the Federal Aviation Administration Determinations of No Hazard allowing for construction of the turbines. A contract for the construction of the Solano 4 Wind Project was awarded to Vestas Corporation and the Solano 4 Wind Project is currently under construction. The expected operation date for the Solano 4 Wind Project is May 2024. Realization of the full capacity of the Solano 4 Wind Project may be delayed into the first quarter of 2025 due to the timeframe established for the PG&E required upgrades. SMUD has developed a mitigation plan for the limited interconnection capacity for the first year of operation, in coordination with CAISO and PG&E, of using all of the existing SMUD Solano Russell substation interconnection capacity combined for the dispatch of all the Solano Wind Project. SMUD completed a combined LGIA amendment administrative process, which combines all phases of the Solano Wind Project so it may operate as one project. This was fully executed by SMUD, CAISO, and PG&E on February 27, 2023.

Distributed Solar Photovoltaic. SMUD owns and operates approximately 2 MW of solar photovoltaic generating facilities. These facilities include installations at the Hedge Substation property, SMUD Headquarters, the East Campus Operations Center, and other smaller photovoltaic systems throughout the service area on parking lots.

Hedge Battery. SMUD owns and operates a 4 MW, 8 MWh, battery energy storage system located near the Hedge Substation in South Sacramento. The facility reached commercial operation in January 2023.

Local Gas-Fired Plants. SMUD constructed five local natural gas-fired plants in its service area: the Carson Project, the Procter & Gamble Project, the Campbell Soup Project, McClellan and the Cosumnes Power Plant (each defined below). These five plants are referred to collectively as the “Local Gas-Fired Plants.” These plants are a strategic component of SMUD’s resource mix. In addition to providing SMUD a total capacity of approximately 1,139 MW, the Local Gas-Fired Plants provide SMUD with needed voltage support, operational and load following capability, and the reliability inherent in having power resources located close to loads. With the exception of McClellan, these plants were financed through the issuance of project revenue bonds by separate joint powers authorities (collectively, the “Authorities”). In late 2021, ownership of all of the Local Gas-Fired Plants was transferred to one of the Authorities, SFA. SMUD has entered into long-term agreements with SFA providing for the purchase by SMUD of all of the power from each of the Local Gas-Fired Plants on a take-or-pay basis. This consolidation created operational and administrative efficiencies without changing any of the functionality of the power plants. Although the Local Gas-Fired Plants are owned by SFA, SMUD has exclusive control of their dispatch and manages their operations as part of its overall power supply strategy.

Payments under the power purchase agreements are payable from the revenues of SMUD's Electric System prior to the payment of the principal of or interest on SMUD's Senior Bonds and Subordinated Bonds (each as defined under the caption "CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS" below), as are other maintenance and operation costs and energy payments. For further discussion of SMUD's obligations to make these payments to SFA, see "CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Joint Powers Authorities*."

The following is a brief description of the five Local Gas-Fired Plants:

The Cosumnes Power Plant (the "Cosumnes Power Plant"). The Cosumnes Power Plant is a 612 MW natural gas-fired, combined cycle plant located in the southern portion of Sacramento County adjacent to SMUD's decommissioned Rancho Seco Nuclear Power Plant. Commercial operation of the Cosumnes Power Plant commenced on February 24, 2006. SFA increased the net generating capacity of the facility by 81 MWs via an Advanced Gas Path ("AGP") upgrade. The additional AGP generation was realized after hardware and software upgrades were completed on both units in March of 2019. The Cosumnes Power Plant is owned by SFA, a joint powers authority formed by SMUD and MID. The existing take-or-pay power purchase agreement between SMUD and SFA expires no earlier than when the related bonds have been paid in full (the outstanding related bonds are scheduled to mature on July 1, 2030). On June 5, 2022, the Cosumnes Power Plant was shut down due to a ground fault in the STG stator. The repair was completed in February 2023 and the plant returned to service on March 5, 2023. See "FACTORS AFFECTING THE REGION – Cosumnes Power Plant Outage".

The Carson Cogeneration Project (the "Carson Project"). The Carson Project, a 103 MW natural-gas-fired cogeneration project consisting of separate combined cycle and peaking plants, provides steam to the Sacramento Regional County Sanitation District ("SRCSD") wastewater treatment plant adjacent to the site. The Carson Project was originally owned by the CVFA, a joint powers authority formed by SMUD and the SRCSD. Construction of the Carson Project was completed and the plant began commercial operation on October 11, 1995. The CVFA bonds were defeased in September 2019. In late 2021, ownership of the Carson Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the Carson Project will be in effect until terminated by SMUD.

The Procter & Gamble Cogeneration Project (the "Procter & Gamble Project"). The Procter & Gamble Project, a 182 MW natural gas-fired cogeneration facility, is located in an established industrial area of Sacramento. The initial combined cycle portion of the plant began commercial operation on March 1, 1997. Construction of the peaking plant portion of the Procter & Gamble Project commenced during 2000 and the unit achieved commercial status on April 24, 2001. The Procter & Gamble Project produces steam for use in Procter & Gamble Manufacturing Company's oleochemical manufacturing processes and electricity for sale to SMUD. The Procter & Gamble Project was originally owned by the SCA, a joint powers authority formed by SMUD and SFA, a separate joint powers authority. The SCA bonds were defeased in September 2019. In late 2021, ownership of the Procter & Gamble Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the Procter & Gamble Project will be in effect until terminated by SMUD.

The Campbell Soup Cogeneration Project (the "Campbell Soup Project"). The Campbell Soup Project, a 170 MW natural gas-fired cogeneration project, was completed and began commercial operations on December 4, 1997. Upgrades were implemented during 2000, which increased the plant's peaking capacity to 180 MW, well above its net demonstrated capacity of 159.8 MW. The plant is located in south Sacramento adjacent to the Capital Commerce Center (formerly the Campbell Soup Company food processing facility). The Campbell Soup Project was originally owned by SPA, a joint powers authority formed by SMUD and SFA. The SPA bonds were redeemed in July 2015. In late 2021, ownership of the Campbell Soup Project was transferred to SFA. The take-or-pay power purchase agreement between

SMUD and SFA relating to the Campbell Soup Project (the “Campbell Soup/McClellan PPA”) covers both the Campbell Soup Project and McClellan and will be in effect until terminated by SMUD. As part of the Zero Carbon Plan, SMUD is exploring retiring the Campbell Soup Project in 2025, contingent upon SMUD having sufficient other resources available and grid reliability can be maintained. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

The McClellan Gas Turbine (“McClellan”). McClellan is a 72 MW natural gas-fired simple cycle combustion turbine generating plant at McClellan Business Park in Sacramento. This turbine is connected to SMUD’s electric system and is operated to meet SMUD’s peak-load requirements. McClellan is aligned for remote starting and operation with both black start and fast start capabilities. SMUD constructed the McClellan unit in 1986 as a 50 MW emergency power source for the McClellan Air Force Base. In 2001, following the Air Force Base closure, McClellan was upgraded to 72 MW and converted for SMUD use. In May 2007, SMUD transferred ownership of McClellan to SPA for more efficient operation. SPA did not issue debt related to McClellan. In late 2021, ownership of McClellan was transferred to SFA. SFA passes all costs of operations and maintenance through to SMUD in accordance with the terms of the Campbell Soup/McClellan PPA. In exchange for paying all costs related to McClellan, SMUD receives all of the power generated thereby on a take-or-pay basis. As part of the Zero Carbon Plan, SMUD is exploring retiring McClellan in 2024, contingent upon SMUD having sufficient other resources available and grid reliability can be maintained. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

Fuel Supply

General. SMUD is obligated to arrange for the purchase and delivery of natural gas to the Local Gas-Fired Plants. Management of the natural gas procurement and delivery process is a key focus of SMUD’s reliability and risk policies. Although the natural gas consumption of the power plants for SMUD’s load can vary significantly depending on the season, precipitation, and the market price of power and natural gas, the plants are forecasted to need, on average in 2023, a total of approximately 97,000 Decatherms per day (“Dth/day”) with a daily peak slightly more than 171,000 Dth/day of natural gas. SMUD has implemented a comprehensive strategy to secure a reliable and diversified fuel supply through a variety of agreements for the supply, transportation, and storage of natural gas.

Supply. SMUD hedges a significant portion of its expected gas needs to meet customer power requirements. This includes gas for the Local Gas-Fired Plants and for the Sutter Energy Center. See “Power Purchase Agreements – *Sutter Energy Center*”. This is accomplished through a combination of long-term supply arrangements and an exposure reduction program. The program consists of a primary rolling three-year exposure reduction component, a fuel hedging component on a rolling three-year basis, as well as supplemental fixed calendar year components reaching out up to five calendar years. Long-term arrangements may consist of a combination of physical commodity supply contracts, financial hedges, or options. Natural gas is purchased from a wide variety of producers and marketers at the northern and southern California borders, at Alberta, Canada and from the San Juan and the Rocky Mountain supply basins. SMUD has a number of both fixed-price supply agreements and financial hedging contracts to fix gas costs ranging from one month to several years in duration. Including fixed price biogas contracts as of March 31, 2023, these contracts have hedged the price of approximately 83%, 66% and 55% of SMUD’s forecasted natural gas requirements for 2023, 2024 and 2025, respectively. While the financial effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted.

SMUD has contracted with the Northern California Gas Authority No. 1 (“NCGA”) to purchase an approximate average of 8,700Dth/day over the remaining life of a contract expiring May 31, 2027 (the “NCGA Contract”). Under the NCGA contract, SMUD pays a discounted variable price for the fuel and

anticipates periodically fixing the effective price under separate hedging contracts. Currently the delivery point for the NCGA Contract is the AECO hub in Alberta. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. To increase delivery efficiencies, SMUD expects to exchange the gas delivered at the AECO hub under the NCGA Contract with gas to be delivered at the Malin receipt point beginning in November 2023.

SMUD has also contracted with the Northern California Energy Authority (“NCEA”) to purchase an approximate average of 22,000 Dth/day or to be converted to the approximate value in Megawatt-hours (“MWh”) of electricity over the remaining life of a contract expiring on May 31, 2049. The gas will be delivered to the SMUD system via the Malin receipt point on the PG&E backbone system. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. SMUD will pay a discounted variable price for the fuel and anticipates periodically fixing the effective price under separate hedging contracts.

Renewable Natural Gas Supply. As a component of meeting SMUD’s RPS goals, SMUD procures renewable natural gas and digester gas as fuels to generate renewable electricity from the Cosumnes Power Plant. Descriptions of the renewable natural gas supply agreements are provided below.

In March 2009, SMUD entered into a 15-year contract (that qualifies as renewable energy) with Shell Energy North America (US), L.P. (“Shell Energy”) to purchase up to 6,000 Dth/day of renewable natural gas produced from a landfill project in Texas. SMUD began taking deliveries of this supply in April 2009. In March 2012, SMUD amended the contract with Shell Energy to increase the maximum volumes to 7,300 Dth/day and extended the term by 10 years to March 31, 2034. Currently, the delivery point is PG&E Topock and SMUD is using its long-term transport capacity to deliver it to the Cosumnes Power Plant. In 2016, SMUD entered into a 3-year contract with Shell Energy to sell back the entire volume of renewable natural gas purchased, less 500 Dth/day, to be sold into the vehicle transportation markets. Upon expiration of the initial 3-year contract for the sale of biogas to Shell Energy, SMUD extended the sell back of the entire volume of biogas twice for an additional 3 years with Element Markets (now Anew RNG, LLC), starting in 2020 and 2023.

SMUD contracted with Heartland Renewable Energy, LLC (“HRE”) in December 2009 for a 20-year supply of up to 7,000 Dth/day of renewable natural gas from a digester facility in Colorado. Deliveries began in March of 2014. Currently, the delivery point is Opal, Wyoming and SMUD uses its long-term transport capacity to deliver it to the Cosumnes Power Plant. HRE has not delivered volumes from the project to SMUD since December 2016 due to current litigation with Weld County, Colorado regarding odor and permit issues. EDF Renewables, the majority owner of HRE, notified SMUD in August of 2017 that it is in discussions with a short list of bidders to sell its interests in the facility. In June of 2020, the project was purchased and SMUD’s contract was assigned to the new owner, Platte River Biogas, LLC (“PRB”). SMUD and PRB terminated the contract in the third quarter of 2021.

In September 2011, SMUD and CVFA entered into a “Digester Gas Purchase and Sale Agreement” through which the Carson Project cleans nearly all of the digester gas received from Sacramento Regional County Sanitation District (“SRCSD”) and sells it to SMUD for delivery to the Cosumnes Power Plant. In return, SMUD pays all of the Carson Project’s costs in acquiring, cleaning and making the gas available to SMUD. The Digester Gas Purchase and Sale Agreement expires in September 2025. In late 2021, the Digester Gas Purchase and Sale Agreement, along with the Carson Project was transferred to SFA. The Carson Project is currently receiving, processing and selling up to 1,500 Dth/day with provisions for volume increases over time to 2,500 Dth/day. Digester gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations.

In December 2011, SMUD entered into a 20-year agreement with EIF KC Landfill Gas LLC (“EIF”) to purchase up to 7,050 Dth/day of renewable natural gas produced from multiple landfill projects. SMUD began taking deliveries of this supply in January 2014. Currently the delivery point is Kern River – Opal and SMUD uses its long-term transport capacity to deliver it to the Cosumnes Power Plant. Renewable natural gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations. In April 2022 SMUD entered into a transaction to sell the renewable natural gas purchased into the vehicle transportation markets. The transaction expires in March 2025. In 2023, SMUD entered into a 3-year contract with Anew Climate, LLC (“Anew”) to sell back the entire volume of renewable natural gas purchased, to be sold into the vehicle transportation markets.

AB 2196 is a law that defines the criteria by which existing and future renewable natural gas contracts will qualify for the State RPS program. The CEC adopted a RPS Eligibility Guidebook on April 30, 2013, which includes detailed rules for implementation of AB 2196. SMUD received an updated certificate of eligibility from the CEC in July 2014 for the Cosumnes Power Plant that included the quantities of renewable natural gas from all four contracts. The CEC adopted a revised RPS Eligibility Guidebook (Ninth Edition) on April 27, 2017. This latest guidebook did not change the RPS eligibility of any of the above SMUD renewable natural gas and digester gas contracts, but did simplify reporting requirements for these contracts. When fully delivering, these contracts represent roughly 30% of SMUD’s 2020 RPS requirement.

Gas Transmission

SMUD has satisfied its obligation to deliver natural gas to its power plants by constructing a natural gas pipeline, purchasing an equity interest in two PG&E backbone gas transmission lines, and contracting for capacity on a number of existing interstate natural gas transmission lines.

The Local Pipeline. SMUD constructed and owns a 20-inch, 50-mile natural gas pipeline in the greater Sacramento area (the “Local Pipeline”) that transports gas to all of the Local Gas-Fired Plants except McClellan. The Local Pipeline is interconnected with PG&E’s major State gas transmission lines 300 and 401. Additionally, it may be interconnected with one or more private gas gathering pipelines located in the area, a gas storage project and/or other FERC approved pipelines that may be built in the local area. In conjunction with the construction of the Cosumnes Power Plant, SMUD extended the Local Pipeline to the plant site. The 26-mile extension was completed in 2004. The extension is 24 inches in diameter and was designed to serve both the Cosumnes Power Plant and an additional second phase, if constructed.

PG&E Backbone Gas Transmission Lines 300 and 401. In 1996, SMUD purchased an equity interest in PG&E’s backbone gas transmission lines 300 and 401 (referred to as the PG&E backbone). The total capacity acquired at that time was approximately 85,000 Dth/day and consisted of approximately 43,600 Dth/day of firm gas transport from the California–Oregon border at Malin, Oregon and 44,700 Dth/day from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California. SMUD was also entitled to a share of non-firm capacity, which was approximately 4,360 Dth/day; making the total capacity potentially available to SMUD almost 90,000 Dth/day. This purchase made SMUD a co-owner of the PG&E backbone gas transmission lines 300 and 401 and obligated SMUD to pay PG&E to operate the pipelines on its behalf subject to the terms of the purchase agreement and operating protocols. PG&E reduced operating pressures on Line 300 after PG&E suffered a natural gas explosion in San Bruno, CA in September of 2010. Operating pressures and capacity may also fluctuate due to regulatory and other changes. As of December 1, 2021, SMUD holds a total capacity of approximately 87,000 Dth/day, consisting of approximately 47,572 Dth/day of firm gas transport from the California–Oregon border at Malin, and 39,193 Dth/day of firm gas transport from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California.

SMUD also holds additional backbone capacity under tariff service for 5,000 Dth/day of northern path (Redwood) capacity. This contract expires in June 2023. Currently, SMUD is not planning to renew the contract upon expiration.

Kern River Gas Transmission Company Long Term Agreement. SMUD has an agreement with Kern River Gas Transmission Company for 20,000 Dth/day of firm capacity through April 30, 2028. This capacity gives SMUD access to the Rocky Mountain supply basin at Opal, Wyoming, and connects to PG&E Line 300 (owned in part by SMUD) at Daggett, California.

TransCanada Firm Transmission Service Agreements. SMUD has several agreements with TransCanada Corporation that give SMUD access to Canadian supply from the Alberta basin to Kingsgate, British Columbia and the California-Oregon border at Malin. SMUD has agreements for 22,101 Dth/day at the California-Oregon border at Malin via the Gas Transmission Northwest (“GTN”) pipeline that expires in 2023. SMUD has agreements for approximately 12,000 Dth/day from the Alberta ANG/Foothills pipeline, also expiring in 2023. In order to match the Canadian capacity with the takeaway capacity at Malin, SMUD had an agreement with Foothills Pipeline for approximately 10,000 Dth/day that expired on October 31, 2022. Currently, SMUD is not planning to renew the GTN or the Alberta ANG/Foothills agreements.

SMUD’s diversified portfolio of gas transmission arrangements allow for the purchase of gas from a variety of suppliers and locations, and the opportunity to capitalize on regional price differentials where possible. In addition, its ownership interest in the SMUD/PG&E backbone and Local Pipeline enhances the reliability of SMUD’s gas supply.

Gas Storage

SMUD also employs gas storage as part of its overall fuel supply strategy. Gas storage is useful in helping to balance gas supply, mitigate market price volatility, and provide a reliable supply to meet peak day delivery requirements.

SMUD also has a contract with Lodi Gas Storage, LLC, which began in April 2023 and expires in March 2026, for capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

SMUD has a second contract with Lodi Gas Storage, LLC, which began in April 2022 and expires in March 2024, for additional capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

Power Purchase Agreements

SMUD has a number of power purchase agreements to help meet its power requirements. Some of these agreements are described below.

Western Area Power Administration. Effective January 1, 2005, SMUD entered into a 20-year contract with WAPA. SMUD has entered into a replacement agreement extending the term by 30 years for the period of January 1, 2025 through December 31, 2054. Power sold under this contract is generated by the Central Valley Project (“CVP”), a series of federal hydroelectric facilities in northern California operated by the United States Bureau of Reclamation. The contract provides WAPA’s CVP Base Resource customers (including SMUD) delivery of a percentage share of project generation in return for

reimbursement of an equivalent share of project costs. SMUD's CVP Base Resource share is roughly 25% of project generation and costs. This is expected to be approximately 318 MW of capacity and 661 GWh of energy in an average water year but will vary depending on precipitation. Energy available under the contract is determined by water releases required for water supply and flood control and is then shaped into higher value periods within other CVP operating constraints. More capacity and energy are typically available in spring and summer months and less in fall and winter.

SMUD also has a contract with WAPA expiring December 31, 2024, by which WAPA delivers an additional 200-300 MW per hour from projects located in the Pacific Northwest based on certain contractual parameters. In 2022, SMUD received 1,913 GWh of energy under this contract.

Avangrid (formerly Iberdrola Renewables ("Iberdrola")). SMUD has a contract with Iberdrola that provides SMUD with bundled renewable energy (energy plus RECs). The contract agreement is for 126 GWh of wind power generated in Solano County, California. The SMUD Board approved an extension of the wind contract through June 30, 2025.

Patua Project LLC. In April 2010, SMUD entered into a power purchase agreement with Patua Project LLC ("Patua"), a subsidiary of Gradient Resources, for the delivery of up to 132 MW (expected to be 120 MW nominal power output) of renewable energy from geothermal generation being developed in north central Nevada, from a Gradient Resources project known as the Patua Project. The Patua Project was to have been developed in three phases. Since 2010, the agreed upon capacity has been reduced several times. In December 2013, Phase 1 of the project, which had been reduced to 30 MW, finally achieved commercial operation. In 2014, the parties concluded negotiations on the fourth amendment to the power purchase agreement with Patua, which reduced the total capacity down to 40 MW, extended the commercial operation date of Phase 2 to January 1, 2016, and allowed Patua to add up to 13 MW of solar photovoltaics to supplement geothermal production. In addition, this amendment shifted responsibility to Patua for a portion of the long-term transmission service agreements that have been underutilized due to the project not meeting its targets. In November 2015, the Patua Project was acquired by TL Power, LLC, a wholly owned subsidiary of Cyrq Energy, Inc. ("Cyrq"). In December 2015, Cyrq terminated Phase 2. Upon termination of Phase 2, the contractual right for Cyrq to add solar photovoltaics to supplement geothermal production was reduced to 10 MW. As a result of poor performance during the first year of operation, SMUD reduced its obligation to take power from 30 MW to 25 MW. Performance continued to lag in 2015 and 2016 and SMUD further reduced its obligation to take power from 25 MW to 19 MW.

Renewable Energy Feed-In Tariff. In September 2009, SMUD's Board authorized a feed-in tariff program for the purchase of renewable energy from local renewable energy projects connected to SMUD's distribution system. SMUD's Board authorized connection of up to 100 MW under the feed-in tariff which included standard payment rates and standard purchase terms for power. The feed-in tariff program became effective on January 1, 2010. Under the feed-in tariff, SMUD has executed 20-year term power purchase agreements for solar projects totaling 98.5 MW. Construction and start-up were completed on all projects between 2010 and 2012.

CalEnergy LLC. In August 2014, SMUD entered into a 22-year power purchase agreement with CalEnergy LLC for the purchase of 30 MWs per year of renewable energy from its Salton Sea geothermal facilities. As of July 1, 2017, SMUD began receiving up to 10 MWs from the CalEnergy portfolio, which escalated to the full 30 MWs on May 1, 2020.

Rancho Seco Solar. In October 2015, SMUD entered into a 20-year power purchase agreement with Rancho Seco Solar LLC for the purchase of energy from a 10.88 MW solar PV project sited on SMUD's property at the closed Rancho Seco Nuclear Generating Station. Commercial operation was achieved in August of 2016. Rancho Seco Solar LLC leased the property from SMUD under a land lease

agreement. The output of this project directly serves two large commercial customers that executed agreements with SMUD for retail supply of solar power.

In May 2019, SMUD entered into a 30-year power purchase agreement for an additional 160 MW solar PV project with Rancho Seco Solar II, LLC. The project is located on SMUD-owned property at the closed Rancho Seco Nuclear Generating Station, adjacent to the existing 10.88 MW solar PV project. Construction began in 2019, and the project became commercially operable in February 2021.

Grady Wind Energy. In October 2015, SMUD entered into a 25-year power purchase agreement with Grady Wind Energy LLC (“Grady”) for the purchase of energy from a 200 MW wind project located in New Mexico (the “Grady Project”). The Grady Project began commercial operations on August 5, 2019. Energy from the Grady Project is delivered to CAISO. SMUD purchases 100% of the Grady Project output which includes energy, renewable energy credits, and capacity attributes. SMUD and Grady had a short-term (6-month) agreement spanning the winter 2021-spring 2022 season wherein Grady has the option to pay SMUD to curtail up to 100 MW. This agreement does not affect the remaining term of the agreement.

Great Valley Solar 2, LLC. In January 2017, SMUD entered into a 20-year power purchase agreement with Great Valley Solar 2, LLC for the purchase of energy from a 60 MW solar PV project located in Fresno County, California. The project’s commercial operation date was December 28, 2017.

ARP-Loyalton Cogen LLC. On September 14, 2016, Senate Bill 859 (“SB 859”) was signed into law. Under SB 859, a POU must procure its proportionate share of 125 MWs of renewable energy from biomass plants burning high hazard forest fuels, subject to terms of at least five years. Seven POU’s (SMUD, MID, Turlock Irrigation District (“TID”), Anaheim Public Utilities, Imperial Irrigation District, Los Angeles Department of Water & Power and Riverside Public Utilities, collectively described herein as the “ARP-Loyalton POU’s”) jointly solicited proposals for up to 29 MW of contract capacity for renewable energy to meet the requirements of SB 859. In January 2018, SMUD entered into a 5-year power purchase agreement with ARP-Loyalton Cogen LLC to fulfill 18 MWs of the required 29 MWs with SMUD’s share being just over 23 percent (the “ARP-Loyalton PPA”). See “—Roseburg Forest Product Co.” below for a discussion of the remaining SB 859 capacity. The contract became effective on April 1, 2018. On February 18, 2020, ARP-Loyalton Cogen LLC filed for Chapter 11 bankruptcy and stopped producing and selling energy from the biomass plant. On May 7, 2020, the bankruptcy court approved the sale of the Loyalton facility to Sierra Valley Enterprises, LLC (“SVE”). SVE initially expressed interest in bringing the facility back into service; however, the bankruptcy trustee requested repeated extension of the deadline for SVE to accept or reject the ARP-Loyalton PPA. The latest deadline was April 19, 2023, the date of expiration of the ARP-Loyalton PPA term. As SVE did not resume operations before the end of the ARP-Loyalton PPA term, the ARP-Loyalton POU’s have negotiated a settlement agreement with the bankruptcy trustee (the “ARP-Loyalton Settlement Agreement”). The ARP-Loyalton Settlement Agreement defines funds from the performance security that the ARP-Loyalton POU’s will keep to cover legal and administrative fees, along with a contingency amount to cover potential risk of future damages. Since the ARP-Loyalton POU’s entered into a 5-year agreement to procure compliant biomass and provided SVE the opportunity to accept the ARP-Loyalton PPA and restart operations, the ARP-Loyalton POU’s consider their statutory obligations to have been fulfilled.

Roseburg Forest Products Co. For the remaining SB 859 biomass obligation of 11 MW, SMUD and the other ARP-Loyalton POU’s have entered into a five-year power purchase agreement with Roseburg Forest Products Co. SMUD’s share of the contract capacity is 2.5795 MW, and the plant began operating under the contract on February 26, 2021.

Sutter Energy Center. SMUD entered into an initial two-year contract (with a third-year exercisable option) with Calpine Energy Services, L.P. (“Calpine”) for the ability to schedule up to 258

MWs of energy from Sutter Energy Center. The Sutter Energy Center is a natural gas-fired, combined-cycle facility located in Yuba City, California. The initial contract became effective on April 1, 2018. SMUD exercised its option to extend the contract, which expired November 1, 2020. SMUD entered into a new contract with Calpine for the same 258 MWs of energy that became effective January 1, 2021, and had an original expiration date of January 1, 2024. In December 2021, SMUD extended this contract through December 31, 2026.

Drew Solar, LLC. In June 2018, SMUD entered into a 30-year power purchase agreement with Drew Solar, LLC for the purchase of energy from a 100 MW solar PV project located in Imperial County, California. The project’s scheduled commercial operation date was set to be December 31, 2021. The commercial operation date was delayed due to Force Majeure claims surrounding the COVID pandemic and supply chain constraints caused by changes in Federal regulatory requirements. The project began commercially operating on November 3, 2022.

Wildflower Solar. In October 2018, SMUD entered into a 25-year power purchase agreement with Wildflower Solar I, LLC, for the purchase of energy, capacity, and RECs from a 13 MW solar PV project located in Rio Linda, California. The project began commercially operating on December 18, 2020.

Coyote Creek (Formerly Sacramento Valley Energy Center, LLC.) In August 2021, SMUD entered into a 30-year power purchase agreement with Sacramento Valley Energy Center, LLC for the purchase of energy from a 200 MW solar PV and 100 MW four-hour Battery Energy Storage System (“BESS”) capacity project located in Sacramento County, California. The project’s commercial operation date was expected to be December 31, 2023. The scheduled commercial operation date has been delayed to 2026 due to ongoing development and permitting delays.

SloughHouse Solar, LLC. In September 2021, SMUD entered into a 30-year power purchase agreement with SloughHouse Solar, LLC for the purchase of energy from a 50 MW solar PV project located in Sacramento County, California. The project’s commercial operation date was originally expected to be December 31, 2023, but the commercial operation date has been delayed to 2026 due to ongoing development and permitting delays.

Country Acres Solar. In December 2021, SMUD issued a Request for Offers (“RFO”) seeking qualified Power Purchase Agreement offers for a utility scale PV with BESS project under development which will interconnect to SMUD’s North Area transmission system. The project site is located on over 1,000 acres in Placer County near the city of Roseville. SMUD selected a developer for the power purchase agreement, which is currently expected to be in place by the third quarter of 2023. Development efforts are underway with an expected commercial operation date in late 2025 to early 2026.

Geysers Power Company, LLC. In March 2021, SMUD executed a 10-year power purchase agreement with Geysers Power Company, LLC for 100 MW of capacity from the Geysers geothermal energy plant located in Lake and Sonoma Counties, California. SMUD started to receive deliveries on January 1, 2023.

Transmission Service Agreements

TANC California-Oregon Transmission Project. The 340-mile COTP is one part of a three 500-kV line coordinated system known as the California-Oregon Intertie (“COI”). The COTP is allocated one-third of the 4,800 MW capability of the COI system (see related agreements below). TANC is entitled to use 1,390 MW and is obligated to pay approximately 80% of the operating costs of the COTP. SMUD is a member of TANC and a party to Project Agreement No. 3 (“PA3”), under which it is entitled to 378 MW and obligated to pay on an unconditional take-or-pay basis about 27.5% of TANC’s COTP debt service and

operations costs, subject to a “step-up” obligation of up to 25% of its entitlement share upon the unremedied default of another TANC member-participant. In 2009, SMUD entered into a long-term layoff agreement with certain members that increased SMUD’s entitlement by 35 MW. In 2014, SMUD entered into another long-term layoff agreement with certain other members that increased SMUD’s COTP entitlements by 128 MW and amended the 2009 layoff agreement that returned 13 MW to a member. As of December 31, 2018, SMUD was entitled to approximately 528 MW of TANC’s transfer capability for imports and 405 MW for exports, and is obligated to pay approximately 38.6% of TANC’s COTP debt service and operations costs. SMUD’s payments under this contract, like SMUD’s payments under its other power purchase and transmission service agreements, are treated as “Maintenance and Operation Costs” or “Energy Payments” under the resolutions securing the Senior Bonds and Subordinated Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below). SMUD relies on its COTP rights to purchase power, access contingency reserves through the Western Power Pool, and obtain renewable resources to supplement its own resources to serve its load. TANC maintains its own property/casualty insurance program. TANC’s budget for COTP costs, support services and advocacy expenses is about \$45.4 million for 2023. SMUD’s obligation of the TANC budget is about \$17.4 million for 2023.

TANC Tesla-Midway Transmission Service. TANC has a long-term contract with PG&E to provide TANC with 300 MW of transmission service between PG&E’s Midway Substation and the electric systems of the TANC Members (the “Tesla-Midway Service”). SMUD’s share of the Tesla-Midway Service had been 46 MW. As part of the 2009 long-term layoff agreement, SMUD acquired an additional 2 MW of South-of Tesla Principles (“SOTP”) transmission rights for 15 years starting February, 2009 from another TANC member, bringing SMUD’s share of the Tesla-Midway Service to 48 MW.

Bonneville Power Administration. In 2009, SMUD entered into a transmission service agreement with the Bonneville Power Administration (“BPA”) for 60 MW of firm point-to-point transmission service from BPA’s Hilltop substation in north eastern California to the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua geothermal project over BPA’s 230kV transmission lines. In early 2013, in accordance with BPA’s transmission tariff, the transmission service was split into two 30 MW services and deferred as appropriate to better fit the timing of expected commercial operation of Phase 1 and Phase 2 of the Patua Project. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Patua Project LLC.” SMUD submitted another request for the 30 MW of transmission procured for Phase 2 of the Patua Project to split the service into a 10 MW and a 20 MW service, with the 10 MW of service deferred and timed with the originally expected commercial operation date of Phase 2 of the Patua Project. With the termination of Phase 2 of the Patua Project and SMUD’s reduced obligation due to the poor performance of Phase 1 of the Patua Project, much of the transmission reserved for it will no longer be needed. BPA does not have a provision in its transmission tariff for early termination of transmission service. However, the power purchase agreement with Patua requires Patua to cover unused transmission that SMUD has procured for the Patua purchases. On January 1, 2020, SMUD’s transmission rights with BPA were reduced to 19 MW. This now aligns with SMUD’s PacifiCorp transmission rights of 19 MW described in the immediately following paragraph.

PacifiCorp. In 2009, SMUD entered into a transmission service agreement with PacifiCorp for 60 MW of firm point-to-point transmission service across PacifiCorp’s high voltage step-up transformer at the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua Project. In early 2013, in accordance with PacifiCorp’s transmission tariff, the commencement of the 60 MW of transmission service was deferred to fit the timing of first deliveries expected from the 30 MW of Phase 1 of the Patua Project. In 2013, SMUD terminated the 60 MW of transmission service and requested two new transmission services of 30 MW each, with service start dates timed to better fit with the expected start dates of Phase 1

and Phase 2 of the Patua Project. With the reduction in expected output of the Patua Project, SMUD terminated the second 30 MW transmission agreement, and replaced it with a 10 MW transmission service agreement for Phase 2 of the Patua Project. With the termination of Phase 2 of the Patua Project, SMUD terminated the 10 MW Pacificorp transmission service agreement and as a result of the reduced obligation to take power from the Patua Project, SMUD has reduced its remaining Pacificorp transmission service from 30 MW to 19 MW.

Western Area Power Administration. SMUD does not have a direct interconnection of its power system to the COTP. To receive power deliveries that use its COTP rights, SMUD has a long-term transmission service agreement with WAPA for transmission of 342 MW of power from the COTP line (received at WAPA's Tracy or Olinda substations) to SMUD's system. In May of 2011, WAPA completed the Sacramento Voltage Support Transmission Project. Completion of this project has given SMUD an additional 165 MW of transmission service rights on WAPA's system from the COTP at the Olinda Substation to SMUD's system at the Elverta Substation.

Projected Resources

The following tables titled "Projected Requirements and Resources to Meet Load Requirements Energy Requirements and Resources" (the "Energy Table") and "Capacity Requirements and Resources Net Capacity – Megawatts" (the "Capacity Table") describe SMUD's contracted commitments and owned resources available to meet its forecasted load requirements through the year 2032. Resources are shown on an annualized basis with market purchases netted against surplus sales to arrive at a single net position for each year. Because SMUD's available resources do not exactly match its actual load requirements on an hourly basis, there are times during a year when resources available will either exceed or be insufficient to meet SMUD's needs. Expected actual capacity values are included in the tables. These values may differ from measured net demonstrated capacity values of the Local Area Gas-Fired Plants. The table below also includes the impact energy efficiency has on resource requirements as discussed below under "Demand Side Management Programs." See "BUSINESS STRATEGY" and "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Local Gas-Fired Plants.*"

Resources listed in both the Energy Table and the Capacity Table are listed as either renewable or non-renewable. Generally, SMUD follows the CEC guidelines for eligibility requirements. Some of SMUD's renewable resources listed include solar, wind, geothermal, small hydroelectric facilities with a capacity of 30 MW or less, and biomass (representing generation from a fuel comprised of agricultural wastes and residues, landscape and tree trimmings, wood and wood waste).

As in any forecast, assumptions are made. In both the Energy Table and the Capacity Table the WAPA and UARP forecasts assume average water conditions throughout the period. On the capacity table, WAPA and Cosumnes Power Plant renewable capacity is estimated based on the ratio of renewable energy to total WAPA or Cosumnes Power Plant energy. See "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Hydroelectric.*"

The Uncommitted Purchases (Sales) on the tables represent either anticipated future needs or surpluses. Future needs are met well in advance of delivery. They also include both renewable and non-renewable resources.

The Transmission Losses represent reductions in the amount of energy or capacity from the location it was purchased to the point of entering SMUD's electrical system. This amount reduces the Total Resources available to meet the Total Projected Energy Requirements of the electrical system.

Demand Side Management Programs

SMUD's demand-side management initiatives represent an integral element of its total resource portfolio, and are organized into two major components: energy efficiency and load management programs. Energy efficiency offerings include a wide variety of programs and services to customers to retrofit or upgrade existing equipment and fixtures and to install new energy efficiency measures in existing and new construction facilities. Load management allows SMUD to reduce the load on the electric system by cycling residential air conditioning, and calling upon commercial/industrial customers to curtail energy usage when energy is constrained during the summer or system emergencies. Load management programs are projected to allow SMUD to shed approximately 60 MW of peak load in an emergency on a hot day, representing about 2% of SMUD's maximum system peak demand.

The customer "smart meter" system with 2-way communication capability provides information regarding customer usage patterns, which is expected to help SMUD tailor rate designs that provide customers with both the information and ability to manage their energy usage around high energy cost periods.

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**PROJECTED REQUIREMENTS AND RESOURCES TO MEET
LOAD REQUIREMENTS⁽¹⁾
ENERGY REQUIREMENTS AND RESOURCES (GWh)**

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Renewable Resources										
<u>District or Joint Powers Authority Owned:</u>										
UARP - Small Hydro ⁽²⁾	115	93	92	94	94	95	94	94	94	95
Solano Wind	585	738	895	902	902	904	902	902	902	904
Cosumnes-Shell Landfill Gas and Digester Gas ⁽³⁾	48	166	167	582	692	692	692	692	692	692
Total	748	996	1,154	1,578	1,688	1,691	1,688	1,688	1,688	1,691
<u>Purchases</u>										
Western (WAPA) – Small Hydro ⁽²⁾	13	15	15	15	15	15	15	15	15	15
Grady – Wind	933	900	897	897	897	900	897	897	897	900
Avangrid (Iberdrola) (PPM) - Wind	97	98	45	0	0	0	0	0	0	0
Patua (Gradient/Vulcan) – Geothermal	140	147	147	147	147	147	147	147	141	147
Geysers – Geothermal	876	878	876	876	876	878	876	876	876	878
Cal Energy – Geothermal	218	224	223	223	223	224	223	223	223	224
Great Valley SolarShares	167	170	171	171	169	169	169	166	166	167
Rancho Seco PV2	261	332	330	328	327	325	323	322	320	319
Rancho Seco PV	21	22	22	22	22	22	22	22	22	22
Feed-in-Tariff Photovoltaic – Solar	205	209	208	207	206	205	204	203	202	60
Navajo Drew (NTUA) Solar	299	301	298	297	285	276	273	264	271	237
Sloughhouse (Kings Country)	0	0	0	131	124	124	123	122	122	121
Wildflower Solar	31	31	31	31	33	32	33	31	32	32
CoyoteCreek (SVEC) Solar	0	0	0	519	505	502	500	497	495	492
Country Acres	0	0	0	710	706	703	699	696	692	689
Other Long-Term Contracts	145	150	140	29	8	8	6	6	6	6
Future Renewables	0	0	0	0	1,044	1,989	3,351	4,206	4,537	5,870
Total	3,404	3,477	3,403	4,602	5,587	6,521	7,861	8,693	9,018	10,179
Non-Renewable										
<u>District or Joint Powers Authority Owned:</u>										
UARP – Large Hydro ⁽²⁾	2,561	1,614	1,627	1,647	1,618	1,625	1,635	1,625	1,617	1,626
Cosumnes Power Plant	3,428	4,173	4,187	3,685	2,511	1,792	675	530	528	525
Procter & Gamble Project	786	859	809	831	123	43	2	3	5	4
Carson Project	423	480	435	401	3	0	1	3	4	4
Campbell Soup Project	776	929	926	0	0	0	0	0	0	0
McClellan	24	61	0	0	0	0	0	0	0	0
Total	7,998	8,116	7,984	6,565	4,256	3,460	2,313	2,160	2,155	2,160
<u>Purchases</u>										
Western (WAPA) – Large Hydro ⁽²⁾	410	482	485	485	485	485	485	485	485	485
Western (WAPA) Customers (Wheeling) ⁽²⁾	25	37	38	38	38	38	38	38	38	38
Calpine Sutter	1,733	1,695	1,660	1,585	0	0	0	0	0	0
Committed Purchases	0	0	0	0	0	0	0	0	0	0
Total	2,168	2,213	2,182	2,108	523	523	523	523	523	523
Total Resources	14,319	14,803	14,723	14,852	12,053	12,195	12,384	13,064	13,383	14,552
Uncommitted Purchases / (Sales)	(3,382)	(3,773)	(3,606)	(3,599)	(1,067)	(920)	(921)	(1,374)	(1,471)	(2,351)
Transmission Losses (COTP/CVP)	(3)	(11)	(11)	(9)	(82)	(102)	(129)	(146)	(152)	(179)
Total Projected Energy Requirements	10,933	11,018	11,106	11,244	10,903	11,174	11,335	11,544	11,759	12,021
Energy Efficiency (EE)	16	30	44	57	69	79	89	99	108	117
Customer PV	63	121	181	238	793	844	894	943	988	1,033
Expected Electric Vehicle (EV) Charging	(34)	(75)	(143)	(228)	(324)	(430)	(545)	(674)	(803)	(947)
Electric Building (EB)	(12)	(28)	(50)	(77)	(108)	(146)	(201)	(267)	(339)	(412)
Battery Storage (Utility)	0	0	0	0	(121)	(142)	(188)	(225)	(232)	(266)
Battery Storage (BTM)	(0)	(0)	(1)	(1)	(7)	(11)	(17)	(23)	(31)	(38)
Total Gross Energy Requirements before EE, PV and EV Charging	10,966	11,066	11,136	11,233	11,205	11,368	11,368	11,396	11,451	11,508

(1) Totals may not sum due to rounding.

(2) [2023 based on current precipitation levels as of March 31, 2023. All other years assume average precipitation.]

(3) Includes a biomethane contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”).

CAPACITY REQUIREMENTS AND RESOURCES⁽¹⁾
NET CAPACITY – MEGAWATTS

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Load:										
Planned Peak	2,806	2,807	2,813	2,820	2,766	2,784	2,790	2,795	2,800	2,808
Transmission Losses	28	28	28	28	28	28	28	28	28	28
Dispatchable Demand Resource	(71)	(71)	(71)	(71)	(165)	(183)	(202)	(165)	(165)	(165)
Adjusted Peak	2,764	2,764	2,770	2,778	2,629	2,629	2,616	2,658	2,663	2,671
Reserve Margin	415	415	416	417	394	394	392	399	399	401
Adjusted Peak with Reserves	3,178	3,179	3,186	3,194	3,023	3,023	3,008	3,057	3,062	3,072
Renewable Resources										
District or Joint Powers Authority Owned:										
UARP – Small Hydro	45	45	45	45	45	45	45	45	45	45
Solano Wind	94	97	158	202	204	194	197	198	201	201
Cosumnes – Shell Landfill Gas and Digester Gas ⁽²⁾	7	7	26	94	120	120	120	120	120	120
Total	146	148	229	341	369	359	362	363	365	366
Purchases										
Western (WAPA) – Small Hydro	10	10	9	9	9	9	9	9	9	9
Grady – Wind	34	33	33	32	32	33	33	33	29	29
Avangrid (Iberdrola) (PPM) - Wind	22	21	--	--	--	--	--	--	--	--
Patua (Gradient/Vulcan) – Geothermal	12	12	12	12	12	12	12	12	12	12
CalEnergy– Geothermal	26	26	26	26	26	26	26	26	26	26
Geysers – Geothermal	95	95	95	95	95	95	95	95	95	95
Great Value Solar Shares	40	35	33	14	14	15	16	15	14	13
Rancho Seco – PV1	3	3	3	0	1	2	1	1	1	1
Rancho Seco – PV2	50	66	61	16	23	26	19	17	14	11
Feed-in-Tariff Photovoltaic - Solar	40	35	31	7	10	13	6	8	5	5
Wildflower Solar	8	4	4	1	1	2	2	1	1	1
Navajo Solar	55	49	45	14	16	19	16	14	11	9
Sloughhouse Solar	--	--	--	14	15	17	15	14	13	12
CoyoteCreek Solar with Storage	--	--	--	154	147	152	147	145	143	141
CountryAcre with Storage	--	--	--	225	214	219	213	209	206	204
Stand-alone Storage	4	4	4	4	521	521	625	664	844	994
Future Renewables Solar, Wind	--	--	--	--	90	209	215	289	333	346
Future Firm Renewables (Geo)	--	--	--	--	--	12	125	125	125	185
Other Long-Term Contracts	18	18	17	2	2	2	2	2	2	2
Total	414	410	371	625	1,228	1,383	1,576	1,678	1,881	2,093
Non-Renewable										
District or Joint Powers Authority Owned:										
UARP – Large Hydro	640	640	640	640	640	640	640	640	640	640
Cosumnes Power Plant	563	563	544	476	450	450	450	450	450	450
Carson Project	103	103	103	103	100	100	100	100	100	100
Procter & Gamble Project	166	166	166	166	166	166	166	150	150	150
McClellan	72	72	--	--	--	--	--	--	--	--
Campbell Soup Project	170	170	170	--	--	--	--	--	--	--
Total	1,714	1,714	1,623	1,385	1,356	1,356	1,356	1,340	1,340	1,340
Purchases										
Western (WAPA) – Large Hydro	323	309	304	304	304	304	304	304	304	304
Western (WAPA) Customers (wheeling)	19	18	18	18	18	18	18	18	18	18
Sutter Energy Center	258	258	258	258	--	--	--	--	--	--
Firm Contract Reserves ⁽³⁾	18	17	17	17	17	17	17	17	17	17
Committed Purchases	275	--	--	--	--	--	--	--	--	--
Total	892	602	596	596	338	338	338	338	338	338
Total Variable Renewal Diversity Benefit/(Risk)	4	107	124	263	164	131	162	178	199	215
Uncommitted Purchases / (Sales)	7	197	242	(16)	(432)	(544)	(787)	(840)	(1,062)	(1,281)
Total Resources	3,178	3,179	3,186	3,194	3,023	3,023	3,008	3,057	3,062	3,072

⁽¹⁾ [Based on information available as of March 31, 2023]. Totals may not sum due to rounding. [Capacity values for wind, solar, storage, and future variable renewable projects shown are based on resource effective load carrying capability (ELCC) modeling.]

⁽²⁾ [The Cosumnes Power Plant is a 495 MW plant that includes 100 MW capacity attributable to a biogas contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”) and 395 MW capacity from natural gas.]

⁽³⁾ [SMUD assumes that for all firm system purchases, the suppliers will be planning 5% reserves.]

Balancing Authority Area Agreements

Background. SMUD began operating as an independent control area, later termed a Balancing Authority, on June 18, 2002 within the WECC reliability organization's region. This reduced SMUD's exposure to the costs and reliability risks of the CAISO's markets. SMUD expanded its operational footprint beyond SMUD's service territory to include WAPA's electric system, including the MID, Roseville, and Redding service areas (on January 1, 2005) and the COTP (on December 1, 2005). As described further below, SMUD ceased to be the Balancing Authority on April 30, 2011, as BANC took SMUD's place as the Balancing Authority. SMUD remains the operator of the Balancing Authority through a contract with BANC. SMUD administers the contracts with WAPA and TANC to provide specified Balancing Authority-related and other services, and is compensated by WAPA and TANC for its added labor expense. TANC recovers such Balancing Authority services costs as a part of its annual operating budget from the COTP Participants and WAPA recovers its Balancing Authority services costs through its rates for power and transmission service. The agreement with WAPA, among other terms, establishes operating reserve obligations between the parties. WAPA in turn has agreements with electric systems connected to it to assure that such systems also operate reliably (i.e., MID, Roseville and Redding). As a result of the transition to BANC as the Balancing Authority, SMUD assigned or terminated its interconnection and operations agreements with other interconnecting Balancing Authority areas (i.e., CAISO, BPA and TID). BANC is now the party to these agreements as they primarily address only Balancing Authority matters required for compliance with the reliability standards issued by the North American Electric Reliability Corporation ("NERC"), such as emergency assistance arrangements. See also "OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Western Energy Imbalance Market."

Reliability Standards. The Energy Policy Act of 2005 gave FERC authority to enforce reliability standards for the bulk electric system. In June 2007, these standards became mandatory for SMUD and BANC.

In 2022, SMUD and BANC underwent a combined NERC/WECC audit to evaluate compliance with applicable reliability standards. These audits occur every three years. At the conclusion of the audit, regulators determined that neither entity had any compliance violations related to the Operations and Planning or Critical Infrastructure Protection Standards. SMUD and BANC will undergo another NERC/WECC audit sometime in 2025.

Balancing Authority of Northern California. SMUD, MID, Redding and Roseville executed a Joint Exercise of Powers Agreement (the "BANC JPA Agreement") creating BANC on May 8, 2009. BANC became operational on May 1, 2011 as a Balancing Authority and replaced SMUD as the entity responsible for Balancing Authority-related reliability standards. Since that time, the Trinity Public Utilities District and the City of Shasta Lake have also become members of BANC. As provided in the BANC member agreement, liability for penalties associated with such Balancing Authority-related reliability standards are shared on a *pro rata* basis among the members of BANC. SMUD is the Balancing Authority operator under contract and performs Balancing Authority operational functions on behalf of BANC, much as it did when it was the Balancing Authority. The BANC JPA Agreement assigns cost responsibility based on member load within the BANC Balancing Authority, with SMUD representing approximately 70% of the total load.

Power Pool and Other Agreements

Western Power Pool Agreement. The Western Power Pool ("WPP") is an agreement among over 30 utilities and public agencies in the western United States to coordinate contingency reserve sharing, referred to as the WPP Reserve Sharing Program ("RSP"). The RSP permits participants to rely on one

another in the event that any participant experiences a generating resource outage. While SMUD became an RSP participant in 2009, participation is limited to Balancing Authorities, which SMUD relinquished to BANC in 2011. Under the RSP, BANC and TID (also a WPP member) share their reserve amounts and when necessary may call upon WPP reserves using BANC member systems and unused COTP rights. The WPP RSP permits members to operate more efficiently by reducing the contingency reserves that they would otherwise need to have available if they could not rely on each other.

TANC-SMUD OASIS Administration Agreement. SMUD entered into an agreement with TANC to provide OASIS services (transmission sales and scheduling related services in the BANC BA of TANC members' COTP rights) on September 29, 2005. SMUD is compensated for performing these services. TANC and SMUD entered into a letter agreement dated October 25, 2010 to clarify each party's role for regulatory reliability standards compliance responsibilities and take into account SMUD's increased efforts related to supporting TANC's compliance requirements. SMUD and TANC entered into an agreement to transition this service to the Western Area Power Administration, effective on May 1, 2023. Going forward SMUD will only have a minor role in receiving payments and distributing revenues to the TANC members.

Other Agreements with PG&E

Background. SMUD's electric system was originally purchased from PG&E in 1947. SMUD's service area is mostly surrounded by PG&E's service area and the two electric systems are interconnected at SMUD's Rancho Seco and Lake 230-kV substations.

Interconnection Agreement. PG&E and SMUD executed a Replacement Interconnection Agreement ("RIA") which became effective on January 1, 2010. The RIA provides that SMUD and PG&E operate their interconnections reliably, plan their electric systems to meet their load requirements, and avoid or mitigate impacts they cause by certain electric system modifications. The new agreement has a termination date of December 31, 2024, subject to FERC approval.

Generator Interconnection Agreements. SMUD signed a LGIA with CAISO and PG&E for the Solano 3 Wind Project, effective December 16, 2008, with a 50-year term. The Solano 2 Wind Project has interconnection rights granted through a LGIA, also with the CAISO and PG&E. The agreement became effective in January 2010 and has a term of 20 years. On June 3, 2021, SMUD entered into a LGIA with the CAISO and PG&E, for the planned 90.8 MW Solano 4 Wind project with a 10-year term and automatic renewal for successive one-year terms thereafter. On February 27, 2023, SMUD completed a combined LGIA amendment administrative process which combines the Solano 2, 3 & 4 projects into one Solano Wind Project. The original agreement conditions for the individual projects are carried forward with a new combined project maximum production limit of 320.8 MW at the point of interconnection at the Russell Substation.

Other generator interconnection agreements include a Small Generator Interconnection Agreement with PG&E for Slab Creek with a 22-year term which became effective on January 14, 2010, and a Small Generator Interconnection Agreement with PG&E for the Chili Bar Project with a 10-year term which became effective on June 2, 2021.

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SELECTED OPERATING DATA

Selected operating data of SMUD for the four years ended December 31, 2019 through 2022, and for the three months ended March 31, 2023 and March 31, 2022 are presented in the following table.

SMUD SELECTED OPERATING DATA CUSTOMERS, SALES, SOURCES OF ENERGY AND REVENUES

	Three Months Ended March 31,		Year Ended December 31,			
	2023	2022	2022	2021	2020	2019
Customers at End of Period:						
Residential	577,659	573,693	576,471	572,786	568,741	565,103
Commercial and industrial	69,503	69,531	69,512	69,426	68,628	68,203
Other	7,284	7,331	7,290	7,345	7,354	7,406
Total	<u>654,446</u>	<u>650,555</u>	<u>653,273</u>	<u>649,557</u>	<u>644,723</u>	<u>640,712</u>
MWh Sales:						
Residential	1,108,861	1,010,095	4,763,277	4,749,079	4,906,566	4,493,548
Commercial and industrial	1,234,611	1,313,519	5,805,052	5,649,474	5,453,120	5,616,920
Other	14,045	14,272	53,965	54,473	55,590	55,770
Total	<u>2,357,517</u>	<u>2,337,886</u>	<u>10,622,294</u>	<u>10,453,026</u>	<u>10,415,276</u>	<u>10,166,238</u>
Surplus power/out of area sales	<u>989,530</u>	<u>551,317</u>	<u>2,493,651</u>	<u>2,774,907</u>	<u>2,259,991</u>	<u>1,878,205</u>
Total	<u>3,347,047</u>	<u>2,889,203</u>	<u>13,115,945</u>	<u>13,227,933</u>	<u>12,675,267</u>	<u>12,044,443</u>
Sources of Energy Sold MWh:						
Generated by SMUD	1,683,465	1,297,158	4,368,126	6,776,244	6,414,380	7,143,944
Purchased or exchanged	1,773,658	1,679,188	9,162,576	6,884,003	6,691,279	5,324,217
Total	<u>3,457,123</u>	<u>2,976,346</u>	<u>13,530,702</u>	<u>13,660,247</u>	<u>13,105,659</u>	<u>12,468,161</u>
Less System losses and SMUD usage	<u>106,194</u>	<u>87,143</u>	<u>414,757</u>	<u>432,314</u>	<u>430,392</u>	<u>423,718</u>
Total	<u>3,350,929</u>	<u>2,889,203</u>	<u>13,115,945</u>	<u>13,227,933</u>	<u>12,675,267</u>	<u>12,044,443</u>
Gross System peak demand (kW) ⁽¹⁾	1,549,000	1,526,000	3,263,000	3,019,000	3,057,000	2,927,000
Average kWh sales per residential customer ⁽²⁾	1,921	1,762	8,293	8,316	8,650	7,987
Average Revenue per kWh Sold:						
Residential ⁽²⁾ (cents)	14.52	14.34	16.73	16.20	15.27	14.90
Commercial & industrial ⁽²⁾ (cents)	13.91	12.11	13.97	13.95	13.17	12.71

⁽¹⁾ Peak system MW values are measured at the four SMUD interconnection points and exclude SMUD's generation losses. Historical values include the impacts of dispatchable, non-dispatchable, and energy efficiency program capacity savings.

⁽²⁾ The average kWh sales per residential customer and the average revenue per kWh sold are calculated based upon billed and unbilled sales.

Source: SMUD

SELECTED FINANCIAL DATA

SMUD Financial Information

The following table presents selected financial data of SMUD. Under generally accepted accounting principles, data with respect to SMUD's component units, such as the Authorities, is included with that of SMUD. The following presents data for SMUD only and not its component units, such as the Authorities. SMUD's audited financial statements for the years ended December 31, 2022 and December 31, 2021 are included in APPENDIX B attached to this Official Statement. The following unaudited data for SMUD (excluding its component units) is drawn from SMUD's financial records that have been subjected to the auditing procedures applied in the audits of SMUD's and its component units financial statements for the years ended December 31, 2019 through 2022. The selected financial data for the periods ended March 31, 2023 and March 31, 2022 are derived from SMUD's unaudited financial records, which

have been prepared on the same basis as SMUD’s data for the years ended December 31, 2019 through 2022. The selected financial data for the period ended March 31, 2023 are not necessarily indicative of the financial data to be expected for the entire year ending December 31, 2023.

SMUD FINANCIAL DATA⁽¹⁾
(thousands of dollars)

	Three Months Ended March 31,		Year Ended December 31,			
	2023	2022	2022	2021 (Restated)	2020	2019
Summary of Income						
Operating Revenues ⁽²⁾	\$ 466,524	\$ 378,404	\$ 2,138,655	\$ 1,784,290	\$1,582,979	\$1,553,167
Operating Expenses	(489,270)	(376,017)	(2,102,849)	(1,464,069)	(1,397,845)	(1,412,199)
Operating Income (Loss)	(22,746)	2,387	35,806	320,221	185,134	140,968
Interest and Other Income (Expense)	32,593	10,777	124,704	108,788	63,014	(21,113)
Interest Expense	(18,608)	(19,294)	(74,702)	(81,692)	(80,699)	(66,185)
Change in Net Position	<u>\$ (8,761)</u>	<u>\$ (6,130)</u>	<u>\$ 85,808</u>	<u>\$ 347,317</u>	<u>\$ 167,449</u>	<u>\$ 53,670</u>
Selected Statement of Net Position Information						
Net Plant in Service	\$ 3,604,649	\$ 3,413,234	\$ 3,654,725	\$ 3,502,335	\$3,234,208	\$3,187,135
Construction Work in Progress	343,966	409,932	323,499	365,478	460,155	351,584
Electric Utility Plant – Net.....	<u>\$ 3,948,615</u>	<u>\$ 3,823,166</u>	<u>\$ 3,978,224</u>	<u>\$ 3,867,813</u>	<u>\$3,694,363</u>	<u>\$3,538,719</u>
Unrestricted Cash.....	\$ 554,360	\$ 536,534	\$ 591,410	\$ 569,001	\$ 662,155	\$ 451,800
Rate Stabilization Fund.....	\$ 151,118	\$ 193,608	\$ 156,016	\$ 188,992	\$ 168,726	\$ 143,669
Total Assets	\$ 6,297,170	\$ 6,032,532	\$ 6,421,666	\$ 6,096,865	\$5,826,449	\$5,429,137
Net Position	\$ 2,368,958	\$ 2,286,511	\$ 2,377,719	\$ 2,291,910	\$1,944,593	\$1,777,145
Long-Term Debt ⁽³⁾	\$ 2,228,327	\$ 2,378,960	\$ 2,236,824	\$ 2,387,686	\$2,523,921	\$2,166,389
Debt Service Coverage Ratios						
Parity Debt Service Coverage Ratio ..			2.04x	2.59x	2.25x	2.11x
Parity and Subordinate Debt Service Coverage Ratio.....			1.94x	2.47x	2.14x	2.06x

(1) The financial statements of SMUD comprise financial information of SMUD along with its component units, CVFA, SPA, SCA, SFA, NCGA and NCEA. This table includes only financial information of SMUD excluding its component units. Net operating revenues and expenses and Electric Utility Plant and Capitalization of CVFA, SPA, SCA, SFA, NCGA and NCEA are not included in this table, although amounts paid to or received from the Authorities by SMUD are included.

(2) Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund for each full year as follows:

2023 (\$4.9) million through March 31, 2023

2022 (\$33.0) million

2021 \$20.3 million

2020 \$25.1 million

2019 \$47.0 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See “RATES AND CUSTOMER BASE – Rates and Charges” above.

(3) Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

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Financial Information of SMUD and the Authorities

The following table presents a summary of selected financial information for SMUD and the Authorities.

SUMMARY OF FINANCIAL INFORMATION OF SMUD AND THE AUTHORITIES FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021 (thousands of dollars)

	Year Ended December 31, 2022			Year Ended December 31, 2021 (Restated)		
	SMUD	Authorities	Total ⁽¹⁾	SMUD	Authorities	Total ⁽¹⁾
Summary of Income						
Operating Revenues ⁽²⁾	\$ 2,138,655	\$ 166,674	\$ 2,147,334	\$ 1,784,290	\$ 270,694	\$ 1,790,276
Operating Expenses	(2,102,849)	(120,798)	(2,065,652)	(1,464,069)	(250,980)	(1,450,341)
Operating Income	35,806	45,876	81,682	320,221	19,714	339,935
Interest and Other Income	124,704	1,871	90,044	108,788	712	108,114
Interest Expense.....	(74,702)	(26,482)	(101,184)	(81,692)	(27,608)	(109,300)
Change in Net Position.....	\$ 85,808	\$ 21,265	\$ 70,542	\$ 347,317	\$ (7,182)	\$ 338,749
Selected Statement of Net Position Information						
Net Plant in Service	\$3,654,725	\$ 285,346	\$3,653,281	\$3,502,335	\$ 307,755	\$3,523,243
Construction Work in Progress.....	323,499	24,259	347,758	365,478	1,819	367,297
Electric Utility Plant – Net	\$3,978,224	\$ 309,605	\$4,001,039	\$3,867,813	\$ 309,574	\$3,890,540
Unrestricted Cash	\$ 591,410	\$ 36,454	\$ 627,864	\$ 569,001	\$ 61,375	\$ 630,376
Rate Stabilization Fund	\$ 156,016	--	\$ 156,016	\$ 188,992	--	\$ 188,992
Total Assets	\$6,421,666	\$1,133,461	\$7,191,063	\$6,096,865	\$1,179,848	\$6,916,205
Net Position.....	\$2,377,719	\$ 271,836	\$2,366,803	\$2,291,910	\$ 286,890	\$2,296,261
Long-Term Debt ⁽³⁾	\$2,236,824	\$ 787,215	\$3,024,039	\$2,387,686	\$ 826,171	\$3,213,857

⁽¹⁾ Financial information for SMUD and the SMUD JPAs (CVFA, SPA, SCA, SFA, NCGA and NCEA) include intercompany balances. The financial information reflects balances after the elimination of intercompany accounts including Authorities distributions to SMUD of \$36.5 million in 2022 and \$1.4 million in 2021.

⁽²⁾ Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund as follows:
2022 (\$33.0) million
2021: \$20.3 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See "RATES AND CUSTOMER BASE – Rates and Charges" above.

⁽³⁾ Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

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Management's Discussion of SMUD's Operating Results

Three Months Ended March 31, 2023 (Unaudited). For the three months ended March 31, 2023, SMUD reported a decrease in net position of \$8.8 million as compared to a decrease of \$6.1 million for the three months ended March 31, 2022.

Operating revenues were \$88.1 million higher than 2022. This was primarily due to higher sales of surplus power (\$47.1 million), sales to customers (\$29.0 million), and transfers from the rate stabilization fund (\$9.3 million).

Operating expenses were \$113.3 million higher than 2022. This was primarily due to higher purchased power expenses (\$42.7 million), amortization of pension and OPEB (\$19.5 million), transmission and distribution maintenance expenses (\$12.6 million), administrative and general expenses (\$11.5 million), depreciation expense (\$9.7 million), production expenses (\$4.1 million), production maintenance expenses (\$3.5 million), customer service and information expenses (\$3.3 million), public good expenses (\$2.6 million), and customer accounts expenses (\$2.0 million).

Non-Operating income was \$21.8 million higher than 2022. This was primarily due to a gain on land sale (\$14.3 million), higher interest income (\$6.0 million), and unrealized holding gains (\$2.6 million) offset by investment expenses (\$2 million).

Interest expense decreased \$0.7 million from 2022.

Year Ended December 31, 2022. For the year ended December 31, 2022, SMUD reported an increase in net position of \$85.8 million as compared to an increase of \$347.3 million for 2021.

Operating revenues were \$354.4 million higher than 2021. This was primarily due to higher sales to customers (\$130.7 million), sales of surplus gas (\$96.0 million), sales of surplus power (\$62.2 million), transfers from the RSF (\$24.3 million), customer fees (\$9.5 million), AB 32 revenue (\$4.9 million) and LCFS revenue (\$2.2 million), partially offset by lower gain on sale of carbon allowance futures (\$3.7 million) and transfers to the RSF (\$28.9 million).

Operating expenses were \$638.8 million higher than 2021. This was primarily due to higher purchased power expenses (\$369.6 million), amortization of pension and OPEB (\$126.9 million), production operating expenses (\$114.0 million), transmission and distribution maintenance expenses (\$23.3 million), depreciation expenses (\$8.9 million), transmission and distribution operating expenses (\$8.8 million), public good expenses (\$7.7 million), customer service and information expenses (\$4.5 million), and production maintenance expenses (\$2.8 million), partially offset by lower administrative and general expenses (\$30.4 million).

Non-Operating income increased by \$15.9 million primarily due to higher investment income (\$19.7 million), partially offset by unrealized holding losses (\$3.7 million), closeout of escrow account (\$2.8 million), higher fee based product costs (\$1.9 million), and loss on asset retirements (\$1.9 million).

Interest expense decreased \$7.0 million from 2021.

Year Ended December 31, 2021. For the year ended December 31, 2021, SMUD reported an increase in net position of \$347.3 million as compared to an increase of \$167.4 million for 2020.

Operating revenues were \$201.3 million higher than 2020. This was primarily due to higher sales to customers (\$70.1 million), sales of surplus gas (\$65.4 million), sales of surplus power (\$47.1 million),

transfers from the RSF (\$18.2 million), AB 32 revenue (\$17.9 million) and gain on sale of carbon allowance futures (\$3.1 million), partially offset by transfers to the RSF (\$13.4 million) and lower public good revenue (\$3.5 million).

Operating expenses were \$66.2 million higher than 2020. This was primarily due to higher production operating expenses (\$89.6 million), purchased power expenses (\$47.0 million), and depreciation expenses (\$37.8 million), partially offset by lower amortization of pension and OPEB (\$84.2 million), public good expenses (\$10.7 million), customer accounts expenses (\$6.8 million) and transmission and distribution maintenance expenses (\$5.5 million).

Non-Operating income increased by \$45.8 million primarily due to California Arrearage Payment Program funding (\$41.4 million), a settlement related to Rancho Seco damages (\$15.0 million), higher investment income (\$11.5 million), higher contributions in aid of construction (\$4.0 million), lower legal settlement costs (\$2.2 million), offset by dissolution of RBC CSCDA gas prepay contract (\$10.9 million), lower insurance proceeds (\$8.6 million), lower interest income (\$6.9 million), lower unrealized holding gains (\$4.0) and lower distributions from the JPAs (\$2.6 million).

Interest expense increased \$1.0 million from 2020.

Regulatory Assets. In accordance with Governmental Accounting Standards Board (“GASB”) No. 62, “Regulated Operations,” SMUD defers, as regulatory assets, certain types of expenditures. These assets are amortized and collected through future rates.

As of December 31, 2022, SMUD had a total of \$764.2 million recorded for regulatory assets. Regulatory assets associated with costs related to implementation of GASB No. 68, which requires SMUD to record a net pension liability was \$340.5 million and deferred outflows related to GASB No. 68 was \$86.6 million at December 31, 2022. Regulatory assets associated with costs related to implementation of GASB No. 75, which requires SMUD to record a net Other Post Employment Benefit (OPEB) liability was \$281.0 million and deferred outflows related to GASB No. 75 was \$19.2 million at December 31, 2022. Regulatory assets associated with Rancho Seco decommissioning costs totaled \$83.9 million at December 31, 2022. Nuclear fuel storage costs and non-radiological decommissioning costs have been collected in rates since 2009. For a complete description of these regulatory assets, see Note 8 (Regulatory Deferrals) to SMUD’s financial statements.

The Board has authorized the deferral of any charges or credits that result from the change in valuation of ineffective hedges that should be reported as Investment Revenue/Expense on the Statements of Revenues, Expenses and changes in net position. The Board’s resolution establishes that such charges or credits are not included in rates based on market value changes but are included in rates when the underlying transactions occur. Therefore, under GASB No. 62, “Regulated Operations,” any such changes are included in the Statement of Net Position as regulatory assets or liabilities. For a complete description of these derivative financial instruments, see Note 9 (Derivative Financial Instruments) to SMUD’s financial statements.

RANCHO SECO DECOMMISSIONING

Overview. The 913 MW Rancho Seco Nuclear Power Plant (“Rancho Seco”) began Nuclear Regulatory Commission (“NRC”) licensed operations in 1974. In June 1989, the electorate of SMUD voted against allowing SMUD to continue to operate Rancho Seco as a nuclear generating facility, and the plant was shut down. In 1991, SMUD submitted a report (the “Financial Assurance Plan”) providing required financial assurance to the NRC that SMUD will have sufficient funds available to pay for the cost of decommissioning. On March 17, 1992, the NRC granted SMUD a change from an operating to a

possession-only license for Rancho Seco that relieved SMUD from compliance with a number of NRC regulations applicable to operating nuclear power plants. SMUD also filed a proposed decommissioning plan with the NRC (the “Decommissioning Plan”), which was approved in March 1995.

After the decommissioning efforts began, no suitable disposal option was available to SMUD for the Class B and Class C low level radioactive waste generated during the plant decommissioning. With the used nuclear fuel stored onsite requiring oversight staff, SMUD opted to store the Class B and Class C radioactive waste in an existing interim onsite storage building until a suitable disposal option was available. In November 2007, the possession-only license for Rancho Seco was amended to update the Decommissioning Plan to terminate the possession-only license for the Class B and Class C waste in two phases. Phase I of the decommissioning was completed at the end of 2008. Following verification of the site conditions, SMUD submitted a request to the NRC to reduce the licensed facility from 2,480 acres to the interim onsite storage building and about one acre surrounding it. The request was approved by the NRC in September 2009. Phase II of decommissioning included the approximately two-acre interim storage building containing the Class B and Class C radioactive waste and surrounding area. In September 2013, SMUD entered into a contract with the operator of the low-level radioactive waste disposal facility located in Andrews, Texas. Shipment of the Class B and Class C radioactive waste for disposal was completed in November 2014. SMUD conducted additional clean-up activities and radiological surveys, which were followed by NRC confirmatory surveys. The results of these surveys demonstrated unit dose criteria well below NRC release criteria, and the NRC approved the Phase II area for unrestricted use. On September 21, 2017, SMUD formally requested the termination of the possession-only license. On August 31, 2018, the NRC officially terminated SMUD’s possession-only license for the remaining Class B and Class C waste at Rancho Seco.

As part of the Decommissioning Plan, the nuclear fuel and Greater Than Class C (“GTCC”) radioactive waste is being stored in a dry storage facility (the Independent Spent Fuel Storage Installation or “ISFSI”) constructed by SMUD, adjacent to the former reactor facility. The NRC has separately licensed this facility. The DOE, under the Nuclear Waste Policy Act of 1982, is responsible for permanent disposal of used nuclear fuel and GTCC radioactive waste. SMUD has a contract with the DOE for the removal and disposal of this waste. The DOE was to have a waste repository operating by 1998, but has experienced significant and ongoing delays. The Nuclear Waste Policy Act designates Yucca Mountain in Nevada as the final and exclusive repository for the nation’s used nuclear fuel. The DOE discontinued the Yucca Mountain license review activities in 2010, but after a court ordered the NRC to resume its review in 2013, the NRC published its final safety evaluation report in 2015. The final safety report, and the final environmental impact statement, concluded that the proposed repository would be safe and environmentally sound for one million years.

Nevertheless, seeking alternatives to Yucca Mountain, the Blue-Ribbon Commission on America’s Nuclear Future delivered its final report in January 2012 with several recommendations. The Department of Energy (the “DOE”) responded to the recommendations by issuing a report in January 2013 (Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste). Key to both documents is a focus on used fuel from decommissioned sites including Rancho Seco. The DOE report accepts most of the Blue-Ribbon Commission recommendations, and contains timelines for fuel management options which proposed removing the fuel from Rancho Seco as early as 2021. However, any progress on the strategies proposed by the DOE is dependent on legislative action by Congress. With no legislative action taken to date, the 2021 projected date for fuel removal slips year-for-year. Therefore, SMUD cannot determine at this time when the DOE will fulfill its contractual obligations to remove the nuclear fuel and GTCC waste from the Rancho Seco facility. In the meantime, SMUD continues to incur costs of approximately \$5 to \$6 million per year for storage of used nuclear fuel at the ISFSI. SMUD has filed a series of successful lawsuits against the federal government for recovery of past spent fuel costs, with recoveries to date from the DOE in excess of \$104 million. SMUD plans to continue pursuing cost

recovery claims to ensure it is reimbursed for all such costs in the future. The ISFSI will be decommissioned, and its license terminated after the fuel and GTCC is removed.

Financial Assurance Plan. In accordance with the Financial Assurance Plan, SMUD established and funded an external decommissioning trust fund currently held by Wells Fargo Bank (the “Decommissioning Trust Fund”). Pursuant to the Financial Assurance Plan, SMUD made the final deposit into the Decommissioning Trust Fund in 2008. Additional deposits are not expected but will be made if increased cost estimates or reduced fund interest earnings require it. In 2011, the NRC began requiring that SMUD demonstrate financial assurance for decommissioning the ISFSI as well as the former power facility, increasing the overall cost for decommissioning Rancho Seco. The estimated total cost for decommissioning the ISFSI was approximately \$6.5 million on December 31, 2022. The decommissioning cost estimate is required to be updated every three years. As of December 31, 2022, the balance of the Decommissioning Trust Fund was \$8.98 million, excluding unrealized gains and losses. Based on the current decommissioning cost estimate and the value of the fund, SMUD’s existing Decommissioning Trust Fund provides sufficient funds to complete decommissioning and terminate the ISFSI license.

In addition to these costs, SMUD also estimates that it would cost approximately \$13.1 million to restore the site to make it available for other SMUD uses with some major structures remaining intact. Site restoration is not a legal requirement. No site restoration is currently underway.

EMPLOYEE RELATIONS

SMUD has approximately 2,335 employees, most of whom are covered by a civil service system. SMUD is a contracting member of the California Public Employees’ Retirement System (“PERS”). Approximately 50% of SMUD’s work-force is represented as to wages, hours and other terms and conditions of employment, by one of three recognized employee organizations, the International Brotherhood of Electrical Workers (“IBEW”) Local 1245, the Organization of SMUD Employees (“OSE”), and the SMUD Public Safety Officers’ Association (“PSOA”). The remaining 50% of SMUD’s work-force, which includes managers, professional, administrative, supervisory, confidential and security staff, is unrepresented.

SMUD negotiated a four-year Memoranda of Understanding (“MOU”) with IBEW and the OSE, effective January 1, 2022, through December 31, 2025. Both contracts contain a no-strike/no-lockout clause effective during the life of the agreements. SMUD has an MOU with PSOA effective through December 31, 2026. SMUD has experienced only one labor interruption, which occurred in January 1980 that lasted four days.

RETIREMENT BENEFITS AND POST-EMPLOYMENT MEDICAL BENEFITS

Pension Plans

SMUD participates in PERS, an agent multiple-employer public employee defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. Benefit provisions and all other requirements are established by State statute and SMUD policies. The pension plan provides retirement benefits, survivor benefits, and death and disability benefits based upon employees’ years of credited service, age, and final compensation.

As of June 30, 2021, the last actuarial valuation date for SMUD’s plan within PERS, the market value of the SMUD plan assets was \$2.51 billion. The plan is 100.1% funded on a market value of assets

basis, an increase of 21.0% compared to the June 30, 2020 funded status based on the market value of assets.

As an employer, SMUD is required to contribute a percentage of payroll each year to PERS to fund SMUD's plan based on actuarial valuations performed by PERS. PERS collects the normal cost based on a percentage of payroll and the unfunded liability portion is based on a dollar amount. SMUD also makes partial contributions required of SMUD employees on their behalf and for their account. At the PERS fiscal year ended June 30, 2022, SMUD's required employer contribution rate for normal cost was 9.0% of payroll and the unfunded liability contribution was \$36.3 million. During 2022, SMUD contributed \$52.7 million to PERS (including SMUD's contributions to cover required employee contributions), and SMUD employees paid \$16.5 million for their share of the PERS contribution.

For the fiscal years ending June 30, 2023 and June 30, 2024, SMUD is required to contribute 8.9% and 9.6% of payroll for normal costs and \$22.4 million for fiscal year ending June 30, 2023 for the unfunded liability contribution. There is no estimated employer contribution to the unfunded liability for fiscal year ending June 30, 2024. Assuming no amendments to the plan and no liability gains or losses (which can have a significant impact), PERS has projected that SMUD will be required to contribute 9.5% of payroll to the plan for normal costs and no employer contribution for the unfunded liability for the fiscal year ending June 30, 2025, not including SMUD contributions to cover required employee contributions. The amount SMUD is required to contribute to PERS is expected to increase in the future. The actual amount of such increases will depend on a variety of factors, including but not limited to investment returns, actuarial methods and assumptions, experience and retirement benefit adjustments.

SMUD has the option to prepay an annual lump sum payment to PERS for the unfunded accrued liability portion only (not including SMUD contributions to cover required employee contributions). SMUD made an annual lump sum prepayment of \$35.1 million, and also voluntarily made an additional payment of \$56.3 million, for the unfunded accrued liability for the fiscal year ended June 30, 2022. SMUD also made an annual lump sum prepayment of \$19.5 million, and voluntarily made an additional payment of \$2.9 million for the unfunded accrued liability for the fiscal year ending June 30, 2023.

While SMUD has some ability to adjust the retirement benefits provided to its employees, PERS determines the actuarial methods and assumptions used with respect to assets administered by PERS (including the SMUD plan assets) and makes the investment decisions with respect to such assets. For a description of such actuarial methods and assumptions (including the smoothing conventions used by PERS when setting employer contribution rates) and investments, see the comprehensive annual financial report of PERS (SMUD's plan is part of the Public Employees' Retirement Fund of PERS) available on its website at www.calpers.ca.gov. SMUD cannot guarantee the accuracy of such information and neither the comprehensive annual financial report of PERS nor any other information contained on the PERS website is incorporated by reference in or part of this Official Statement. Actuarial assessments are "forward-looking" information that reflect the judgment of the fiduciaries of the pension plans, and are based upon a variety of assumptions, one or more of which may prove to be inaccurate or be changed in the future. Actuarial assessments will change with the future experience of the pension plans.

GASB issued statement No. 68 "Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27" ("GASB No. 68"). The primary objective of GASB No. 68 is to improve accounting and financial reporting by state and local governments for pensions. Under GASB No. 68, SMUD is required to report the net pension asset or net pension liability (i.e., the difference between the total pension liability and the pension plan's net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. GASB No. 68 separates financial reporting from funding requirements for pension plans. The net pension

liability as of December 31, 2022 is \$235.5 million and the net pension asset as of December 31, 2021 is \$27.7 million.

SMUD provides its employees with two cash deferred compensation plans: one pursuant to Internal Revenue Code (“IRC”) Section 401(k) (the “401(k) Plan”) and one pursuant to IRC Section 457 (the “457 Plan” and collectively, the “Plans”). The Plans are contributory plans in which SMUD’s employees contribute the funds. Each of SMUD’s eligible full-time or permanent part-time employees may participate in either or both Plans, and amounts contributed by employees are vested immediately. Such funds are held by a trustee in trust for the employees upon retirement from SMUD service and, accordingly, are not subject to the general claims of SMUD’s creditors. SMUD makes annual contributions to the 401(k) Plan on behalf of certain employees pursuant to a memorandum of understanding with both of its collective bargaining units. SMUD matches non-represented employee contributions to the 401(k) Plan up to a set amount. SMUD also makes limited discretionary contributions to non-represented employees hired after January 1, 2013, which contributions fully vest after five years. Prior to 2022, SMUD did not match employee contributions, nor make contributions on behalf of its employees to the 457 Plan. Beginning in 2022, SMUD makes annual contributions to the 457 Plan on behalf of certain employees and matches employee contributions up to a set amount pursuant to a memorandum of understanding with one of its collective bargaining units. SMUD made contributions to both Plans of \$7.0 million in 2022 and to the 401(k) Plan of \$6.1 million in 2021. Participating employees made contributions into both Plans totaling \$32.4 million in 2022 and \$30.6 million in 2021.

Other Post-Employment Benefits

SMUD provides post-employment healthcare benefits, in accordance with SMUD policy and negotiated agreements with employee representation groups in a single employer defined benefit plan, to all employees who retire from SMUD, and their dependents. SMUD also provides post-employment healthcare benefits to covered employees who are eligible for disability retirement. SMUD contributes the full cost of coverage for retirees hired before January 1, 1991, and a portion of the cost based on credited years of service for retirees hired after January 1, 1991. SMUD also contributes a portion of the costs of coverage for these retirees’ dependents. Retirees are required to contribute the portion that is not paid by SMUD. The benefits, benefit levels, retiree contributions and employer contributions are governed by SMUD and can be amended by SMUD through its personnel manual and union contracts.

SMUD’s post-employment health care benefits are funded through the PERS California Employers’ Retiree Benefit Trust (“CERBT”), an agent multiple-employer plan. The funding of a plan occurs when the following events take place: the employer makes payments of benefits directly to or on behalf of a retiree or beneficiary; the employer makes premium payments to an insurer; or the employer irrevocably transfers assets to a trust or other third party acting in the role of trustee, where the plan assets are dedicated to the sole purpose of the payments of the plan benefits, and creditors of the government do not have access to those assets.

SMUD has elected to contribute the normal costs to the CERBT but annually receive reimbursement for cash benefit payments from the CERBT. In 2023, SMUD’s contribution for the normal costs to CERBT is \$8.6 million. In 2022 and 2021, SMUD decided to forgo making a contribution for the normal costs to the CERBT because there was a net OPEB asset at December 31, 2021 and December 31, 2020. SMUD can elect to make additional contributions to the trust. During 2022 and 2021, SMUD made healthcare benefit contributions by paying actual medical costs of \$24.5 million and \$24.1 million, respectively. During 2022 and 2021, SMUD received a \$23.3 million reimbursement for cash benefit payments from the CERBT each year.

At June 30, 2022 and 2021, SMUD estimated that the actuarially determined accumulated post-employment benefit obligation was approximately \$381.7 and \$398.2 million, respectively. At June 30, 2022 and 2021, the plan was 97.9% and 113.1% funded, respectively.

SMUD’s actuary uses PERS economic and other assumptions as the basis for the calculation of the post-employment benefit obligation. The actual accumulated post-employment benefit obligation will vary substantially if such PERS assumptions, such as interest rate and life expectancy, among others, prove to be inaccurate or different than SMUD’s actual experience. Although SMUD believes that such assumptions and estimates are reasonable, no assurance can be given that any such assumptions will prove to be accurate, or that SMUD’s actual accumulated post-employment benefit obligation will not materially exceed its estimates. Additional information is available in Note 15 (Other Postemployment Benefits) and “Required Supplementary Information” to SMUD’s consolidated financial statements.

GASB previously issued SGAS No. 75 “Accounting and Financial Reporting for Postemployment Benefits Other than Pensions”. The primary objective of GASB No. 75 is to improve accounting and financial reporting by state and local governments for post-employment benefits other than pensions (“OPEB”). Under GASB No. 75, SMUD is required to report the net OPEB asset or net OPEB liability (i.e., the difference between the total OPEB liability and the OPEB plan’s net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. The net OPEB liability as of December 31, 2022 is \$6.8 million and the net OPEB asset as of December 31, 2021 is \$57.5 million.

CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS

Estimated Capital Requirements

SMUD has a projected capital requirement of approximately \$2.70 billion for the period 2023 through 2027 as shown in the table below. Approximately 60% of this requirement is anticipated to be funded with internally generated funds and cash on hand.

Special projects include costs relating to construction of large substations and the potential construction of Solano Phase 4. The Estimated Capital Requirements table below includes \$207 million for Solano Phase 4. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Solano 4 Project.”

ESTIMATED CAPITAL REQUIREMENTS (Dollars in Thousands)

	Service Area and Other System Improvements Including Distribution System	Improvements to Existing Generation Plant	General Plant	Special Projects	Total Capital Requirements
2023	\$150,334	\$57,763	\$78,675	\$207,427	\$494,199
2024	195,581	40,608	97,225	216,229	549,643
2025	247,528	100,303	107,766	94,651	550,248
2026	247,528	100,303	107,766	94,651	550,248
2027	247,528	100,303	107,766	94,651	550,248

Outstanding Indebtedness

General. SMUD typically finances its capital requirements through the sale of revenue bonds, the sale of commercial paper, from draws on its Revolving Credit Facility (as defined below) and from internally generated funds. With the recent passage of the Inflation Reduction Act and the Infrastructure Investment and Jobs Act SMUD is monitoring and exploring new methods of financing, including those afforded under these two programs that provide not-for-profit public power utilities with direct federal incentive payments.

SMUD's Electric Revenue Bonds (the "Senior Bonds") are issued pursuant to Resolution No. 6649 (the "Senior Resolution") adopted in 1971, as amended and supplemented (the "Senior Resolution"). As of May 1, 2023, SMUD had Senior Bonds in the aggregate principal amount of \$1,841,715,000 outstanding. [If the plan of finance described in the forepart of this Official Statement is implemented in whole, Senior Bonds in the aggregate principal amount of \$[_____] are expected to be outstanding under the Senior Resolution.] See "PLAN OF FINANCE" in the forepart of this Official Statement. The Senior Bonds are payable solely from the Net Revenues of SMUD's Electric System. The Senior Bonds are subordinate in right of payment to the prior payment of "Maintenance and Operation Costs" and "Energy Payments" as defined in the Master Resolution, including payments by SMUD to TANC under PA3, payments by SMUD under power purchase agreements related to the Authorities and payments by SMUD to NCGA and NCEA under their respective gas supply contracts.

SMUD's Subordinated Electric Revenue Bonds (the "Subordinated Bonds") are issued pursuant to Resolution No. 85-11-1 of SMUD, adopted on November 7, 1985, as amended and supplemented (the "Subordinate Resolution"). As of May 1, 2023, SMUD had Subordinated Bonds in the aggregate principal amount of \$200,000,000 outstanding. [If the plan of finance described in the forepart of this Official Statement is implemented in whole, Subordinate Bonds in the aggregate principal amount of \$[_____] are expected to be outstanding under the Subordinate Resolution.] The Subordinated Bonds are payable solely from the Net Subordinated Revenues of SMUD's Electric System. The Subordinated Bonds are subordinate in right of payment to the prior payment of principal of and interest on the Senior Bonds.

SMUD issues commercial paper notes (the "Notes") from time to time. As of May 1, 2023, SMUD's Notes were outstanding in the aggregate principal amount of \$200,000,000. Currently, Notes in the aggregate principal amount of \$300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD's obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds. Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February and August of 2025. SMUD expects to pay \$200,000,000 of the outstanding principal amount of the Notes with proceeds of the [2023 Bonds] (as defined in the forepart of the Official Statement). See "PLAN OF FINANCE" in the forepart of the Official Statement.

SMUD also entered into a revolving credit agreement with a commercial bank and issued its taxable and tax-exempt revolving notes thereunder (collectively, the "Revolving Credit Facility") in February 2022. As of May 1, 2023, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to \$100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD's payment obligations under the Revolving Credit Facility are payable solely from available

revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds. The current term of the Revolving Credit Facility expires in February 2026.

Joint Powers Authorities. SMUD has entered into long-term take-or-pay power purchase agreements with SFA relating to the Local Gas-Fired Plants. Under such agreements, SMUD has exclusive control of the dispatch of all five of the Local Gas-Fired Plants and takes all of the power produced by the Local Gas-Fired Plants. See "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants." The Authorities are each treated as component units of SMUD for accounting purposes. Only SFA has outstanding debt, which relates solely to the Cosumnes Power Plant and is payable solely from capacity payments made by SMUD under the related power purchase agreement. As of May 1, 2023, bonds issued by SFA to finance the Cosumnes Power Plant were outstanding in the aggregate principal amount of \$89,735,000. SMUD's payments under the power purchase agreements relating to the Local Gas-Fired Plants are payable from revenues of SMUD's Electric System prior to the payment of principal of and interest on the Senior Bonds and Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and Subordinate Resolution.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Gas Authority No. 1 ("NCGA"). NCGA is treated as a component unit of SMUD for accounting purposes. NCGA issued \$757,055,000 in bonds in May 2007 for the purpose of paying Morgan Stanley Capital Group in advance for natural gas to be delivered to NCGA and then sold to SMUD pursuant to a long-term purchase contract. SMUD's obligation under the purchase contract is limited to payment for gas supplies delivered by NCGA. SMUD's payments under the purchase contract are payable from revenues of SMUD's Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCGA bonds. As of May 1, 2023, related bonds in the aggregate principal amount of \$142,935,000 remain outstanding.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Energy Authority ("NCEA"). NCEA is treated as a component unit of SMUD for accounting purposes. NCEA issued \$539,615,000 in bonds in December 2018 for the purpose of paying J. Aron & Company LLC in advance for natural gas or electricity to be delivered to NCEA and then sold to SMUD pursuant to a long-term purchase contract. SMUD's obligation under the purchase contract is limited to payment for gas or electricity supplies delivered by NCEA. SMUD's payments under the purchase contract are payable from revenues of SMUD's Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCEA bonds. As of May 1, 2023, related bonds in the aggregate principal amount of \$539,615,000 remain outstanding.

Interest Rate Swap Agreements. SMUD has two interest rate swap agreements relating to previously or currently outstanding Subordinated Bonds and two forward starting interest rate swap agreements relating to potential refunding bonds to be issued in the future, as shown in the following table. For more information, see Note 9 (Derivative Financial Instruments) to SMUD's consolidated financial statements.

<u>Effective Date</u>	<u>Termination Date</u>	<u>SMUD Pays</u>		<u>SMUD Receives</u>	<u>Notional Amount (000's)</u>	<u>Counterparty</u>
7/2/1997	7/1/2024	Floating	SIFMA	5.154%	\$38,165	J Aron & Company LLC
7/15/2003	8/15/2028	Fixed	2.894%	63% of 1M LIBOR	68,450	Morgan Stanley Capital Services, Inc.
07/12/2023	08/15/2041	Fixed	0.718%	70% of 1M LIBOR	132,020	Barclays Bank
07/12/2023	08/15/2033	Fixed	0.554%	70% of 1M LIBOR	75,680	Barclays Bank

The obligations of SMUD under the swap agreements are not secured by a pledge of revenues of SMUD’s electric system or any other property of SMUD. SMUD does not currently have any collateral posting requirements with respect to the interest rate swap agreements, but SMUD may be required to post collateral under certain circumstances. [In connection with the plan of finance described in the forepart of this Official Statement, SMUD expects to terminate the swap with Barclays Bank with a notional amount of \$75,680,000 that would otherwise become effective on July 12, 2023]. See “PLAN OF FINANCE” in the forepart of this Official Statement.

Build America Bonds Subsidy Payments. SMUD’s Electric Revenue Bonds, 2009 Series V (the “2009 Series V Bonds”) and Electric Revenue Bonds, 2010 Series W (the “2010 Series W Bonds”) were issued as “Build America Bonds” under the provisions of the American Recovery and Reinvestment Act of 2009. At the time the 2009 Series V Bonds and 2010 Series W Bonds were issued, SMUD expected to receive an annual cash subsidy payment from the United States Treasury equal to 35% of the interest payable on the 2009 Series V Bonds and the 2010 Series W Bonds. However, as a result of the federal budget process, many payments from the federal government, including Build America Bonds subsidy payments, have been reduced. Absent the federal budget reductions, the aggregate annual cash subsidy payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds would be approximately \$9.8 million. With the current federal budget reductions, SMUD has typically been receiving aggregate annual cash subsidy payments with respect to the 2009 Series V Bonds and the 2010 Series W Bonds of approximately \$9.2 million. It is possible that future federal budget actions could further reduce, or eliminate entirely, the annual cash subsidy payments with respect to Build America Bonds, including the annual cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds. SMUD cannot predict the likelihood of the further reduction or elimination of the Build America Bonds subsidy payments. A significant reduction or elimination of the cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds or the 2010 Series W Bonds could be material.

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Debt Service Requirements. The following table sets forth SMUD’s debt service requirements with respect to SMUD’s Senior Bonds and Subordinated Bonds.

DEBT SERVICE REQUIREMENTS[TO BE UPDATED]⁽¹⁾

Calendar Year	Senior Bonds Debt Service⁽²⁾	Subordinated Bonds Debt Service⁽³⁾	Total Debt Service
2022	\$ 198,841,641	\$ 10,000,000	\$ 208,841,641
2023	208,076,945	10,861,111	218,938,056
2024	176,548,637	7,483,333	184,031,970
2025	177,270,712	8,833,333	186,104,045
2026	177,369,062	5,500,000	182,869,062
2027	177,458,312	6,000,000	183,458,312
2028	177,568,563	6,000,000	183,568,563
2029	126,192,937	6,000,000	132,192,937
2030	136,265,941	6,000,000	142,265,941
2031	141,875,082	6,000,000	147,875,082
2032	141,716,845	6,000,000	147,716,845
2033	141,576,102	6,000,000	147,576,102
2034	144,261,606	6,000,000	150,261,606
2035	144,110,773	6,000,000	150,110,773
2036	143,962,001	6,000,000	149,962,001
2037	83,681,613	6,000,000	89,681,613
2038	83,528,863	6,000,000	89,528,863
2039	80,375,800	6,000,000	86,375,800
2040	80,382,550	6,000,000	86,382,550
2041	85,735,800	6,000,000	91,735,800
2042	31,422,350	28,490,000	59,912,350
2043	31,214,150	28,490,300	59,704,450
2044	31,008,750	28,490,350	59,499,100
2045	30,799,950	28,494,550	59,294,500
2046	25,391,750	28,492,150	53,883,900
2047	25,392,000	28,492,700	53,884,700
2048	25,392,500	28,490,450	53,882,950
2049	25,390,750	28,489,800	53,880,550
2050	25,394,250	-	25,394,250
Total	\$3,078,206,235	\$360,608,077	\$3,438,814,312

(1) Does not include outstanding bonds issued by the Authorities for the Local Gas-Fired Plants. Does not include bonds issued by NCGA, NCEA or SMUD’s portion of bonds issued by TANC. Payments by SMUD which are used by the Authorities, NCGA, NCEA, and TANC to pay debt service on such bonds constitute either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and the Subordinate Resolution.

(2) Includes debt service for the [] Bonds and excludes debt service for the [Refunded Bonds]. Debt service for all Senior Bonds other than the [] Bonds calculated as of December 31, 2022. Debt service for the [] Bonds calculated assuming the [] Bonds are issued on []. Debt service is not reduced by the amount of any subsidy that SMUD currently expects to receive in connection with the 2009 Series V Bonds and 2010 Series W Bonds.

(3) [As of December 31, 2021. Based on an assumed interest rate of 3% per annum following (i) the initial scheduled Mandatory Purchase Date of October 17, 2023 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series A and (ii) the initial scheduled Mandatory Purchase Date of October 15, 2025 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series B.]

Note: Amounts may not add due to rounding.

INSURANCE

SMUD maintains a comprehensive property/casualty insurance program designed to protect against catastrophic losses that would have an adverse effect on its financial position or operational capabilities. Insurance programs are continuously reviewed and modified when construction, operational exposures, or developments in the insurance industry so warrant. Long term relationships with a variety of insurers minimize SMUD's susceptibility to the effects of market cycles. SMUD budgets reserves to meet potential insurance deductibles and self-insured liability claims.

SMUD safeguards assets with all-risk property and boiler/machinery insurance with limits of \$800 million per occurrence for physical damage and business interruption combined. Various coverage sublimits and deductibles apply to losses arising from certain perils, such as business interruption, earthquake, or flood, respectively. Liability insurance is in effect to defend and indemnify SMUD against third party claims, including general, automobile and sudden and accidental pollution claims with policy limits of \$140 million, and wildfire coverage with policy limits of \$250 million, all of which include a variety of self-insured retentions.

Nuclear property and liability insurance policies are maintained in accordance with the NRC's requirements for decommissioned nuclear plants that maintain dry storage of spent fuel on-site. This includes \$100 million in first party property damage and decontamination, \$100 million for nuclear liability arising from accidents on-site, \$200 million for supplier's and transporter's nuclear liability, and \$300 million for nuclear worker liability. SMUD is exposed to possible retrospective assessments for nuclear property events occurring at other nuclear facilities in the United States capped at ten times SMUD's annual nuclear property premium (currently the maximum retrospective assessment is approximately \$1,000,000).

Other types of insurance include non-owned aircraft liability, workers' compensation, crime, cyber security, fidelity, fiduciary liability, directors' and officers' liability, professional errors and omissions, transportation, and builder's risk for major facilities under construction.

LEGAL PROCEEDINGS

SMUD is a party to numerous actions arising out of the conduct of its business and affairs, some of which are discussed below. SMUD believes that any losses or adverse financial results it may suffer in these current actions, to the extent not covered by insurance, would not, in the aggregate, have an adverse material impact on SMUD, its business and affairs, the results of its operations, financial position or liquidity.

Environmental Litigation

SMUD was one of many potentially responsible parties that had been named in a number of actions relating to environmental claims and/or complaints. SMUD has resolved these environmental claims and/or complaints and entered into settlement agreements and/or consent orders. These settlement agreements and consent orders have statutory reopener provisions which allow regulatory agencies to seek additional funds for environmental remediation under certain limited circumstances. While SMUD believes it is unlikely that any of the prior settlements or consent orders will be reopened, the possibility exists. If any of the settlements or consent orders were to be reopened, SMUD management does not believe that the outcome will have a material adverse impact on SMUD's financial position, liquidity or results of operations.

Claim for Accidental Death

In February 2020, SMUD received a claim alleging an employee of a gutter company died after he accidentally came into contact with a SMUD electrical line during an installation. The claim is for approximately \$43 million. SMUD concluded the electrical lines at the site of the accident exceeded required clearances and there is no basis for the claim against SMUD. SMUD management believes that SMUD has no potential liability in this matter and that any costs ultimately borne by SMUD will not have a material adverse impact on SMUD's financial position, liquidity or results of operations.

Proposition 26 Lawsuit

Two SMUD customers jointly filed a complaint against SMUD in October 2019, and subsequently one of the plaintiffs removed themselves from the complaint. The complaint states that SMUD violated Proposition 26 (see "DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Proposition 26" for a description of Proposition 26) when SMUD's Board on June 24, 2019 adopted rate increases for 2020 and 2021. The plaintiff contends the rate increases do not reflect SMUD's reasonable cost of service because they include a 9.2% scalar that SMUD applied to its TOD residential rate restructure in the 2017 rate process which SMUD's Board adopted at that time. Therefore, the plaintiff contends SMUD's 2020 and 2021 rates should be decreased by this scalar amount because the scalar exceeded SMUD's cost of service, and refunded to SMUD customers. Because SMUD has a strong evidentiary record supporting the Board's rate decisions in 2017 and 2019, and views the lawsuit as having little merit, SMUD anticipates the court will rule in SMUD's favor. The plaintiff has requested to amend the complaint, which has delayed the court's proceeding until the amended complaint is filed. While SMUD believes the court will rule in its favor, SMUD is unable to predict the outcome of the litigation or, if or to the extent SMUD ultimately is not successful in the litigation, what remedies against SMUD may be available. SMUD management believes that if SMUD is not successful in the litigation, and to the extent the outcome would have a material adverse impact on SMUD's financial position, liquidity, or results of operations, the Board would make appropriate rate modifications based on an evidentiary record consistent with guidance from a judicial decision in the case.

Other Litigation Matters

Currently, SMUD is party to various claims, legal actions and complaints relating to its operations, including but not limited to: property damage and personal injury, contract disputes, torts, and employment matters. SMUD management believes that the ultimate resolution of these matters will not have a material adverse effect on SMUD's financial position, liquidity or results of operation.

FERC Administrative Proceedings

SMUD is involved in a number of FERC administrative proceedings related to the operation of wholesale energy markets, regional transmission planning, gas transportation and NERC reliability standards. These proceedings generally fall into the following categories: (i) filings initiated by the CAISO (or other market participants) to adopt/modify the CAISO Tariff and/or establish market design and behavior rules; (ii) filings initiated by existing transmission owners (i.e., PG&E and the other IOUs) to pass-through costs to their existing wholesale transmission customers; (iii) filings initiated by FERC on market participants to establish market design and behavior rules or investigate market behavior by certain market participants; (iv) filings initiated by transmission owners under their transmission owner tariffs to establish a regional transmission planning process; (v) filings initiated by providers of firm gas transportation services under the Natural Gas Act; and (vi) filings initiated by NERC to develop reliability standards applicable to owners, users, and operators of the bulk electric system. In addition, SMUD is an active participant in other FERC administrative proceedings, including those related to reliability, variable

resource integration and the changing resource mix, and transmission planning and cost allocation. SMUD management believes that determinations of these FERC proceedings will not have a material adverse effect on SMUD's financial position, liquidity or results of operations.

CPUC Administrative Proceedings

Periodically, PG&E seeks to update its gas transmission and storage ("GT&S") revenue requirements and rate designs. These applications are litigated at the CPUC and affect SMUD through several tariff rates SMUD pays to move natural gas along PG&E's backbone transmission lines. In the 2019 GT&S rate case (the "2019 GT&S Case"), the CPUC affirmed the application in GT&S rates of cost causation principles to prevent excessive and unreasonable costs being shifted to electric generator backbone customers like SMUD, either through proposed changes in PG&E's natural gas storage strategy or through cost shifts within the electric generator customer class.

PG&E filed its 2023 General Rate Case ("GRC") in June 2021 which includes its gas transmission and storage revenue requirements. In September 2021, PG&E filed an application for approval of its Gas Cost Allocation and Rate Design Proposals ("CARD"). SMUD is actively participating in PG&E's GRC and CARD proceedings to ensure that costs are fairly allocated to non-core customers, including electric generator backbone customers. Separately, SMUD continues to participate and monitor a proceeding at the CPUC concerning long-term gas system planning. At this point in these proceedings, SMUD management does not anticipate that the ultimate resolution of such cases will have a material adverse effect on SMUD's financial position, liquidity, or results of operation.

DEVELOPMENTS IN THE ENERGY SECTOR

Electric Market Deregulation

In 1996, the State partially deregulated its electric energy market and the CAISO was established in 1998. Since the CAISO's formation, the State has experienced episodes of higher and more volatile prices for natural gas and wholesale electricity. In reaction to such conditions, SMUD made significant changes to its business strategy to mitigate the impacts of the more volatile and unpredictable energy markets. Volatility in energy prices in the State are always a potential risk due to a variety of factors which affect both the supply and demand for electricity in the western United States. These factors include, but are not limited to, the implementation of the CAISO market design changes, insufficient generation resources, the increase in intermittent renewable energy resources, natural gas price volatility, fuel costs and availability, weather and natural disasters, transmission constraints and levels of hydroelectric generation within the region. While SMUD has taken a number of steps to mitigate its exposure to price volatility associated with these factors, this price volatility under extreme conditions may contribute to greater volatility in SMUD's net revenues from the purchase and sale of electric energy and, therefore, could materially adversely affect the financial condition and liquidity of SMUD. For a discussion of SMUD's current resource planning activities and risk management strategies, see "BUSINESS STRATEGY" above.

Cybersecurity

Cybersecurity continues to be a top priority for SMUD. Attacks or threats directed at critical electric or energy sector operations could damage or cause the shut-down of generation, transmission or distribution assets that are essential to SMUD's ability to serve its customers, cause operational malfunctions and outages affecting SMUD's electric system, and result in costly recovery and remediation efforts. The costs of security measures or of remedying breaches could be material.

SMUD participates in sharing and receiving information about cyber security threats in real-time through the Electricity Information Sharing and Analysis Center (“E-ISAC”), the central hub for such data to actively manage risk related to potential cyber intrusion. SMUD also participates in NERC’s development of mandatory, enforceable cyber security standards to address vulnerabilities in electric utility systems. SMUD also adopts voluntary measures suggested as best practices by the National Institute of Standards and Technology (“NIST”) in its national framework.

SMUD’s prudent response to this ever-changing threat requires constant monitoring and frequent updates to implement new regulatory requirements as they are developed. SMUD manages risk related to frequently changing regulatory requirements by participating in the development of standards at NERC and NIST and through active engagement in the cyber security policy dialogue in Congress.

Physical Security

Physical security is a critical concern for electric utilities as they seek to protect their infrastructure from a range of threats. The electric utility infrastructure is complex and consists of multiple components, such as power plants, substations, transmission and distribution lines, and other facilities. SMUD employs a dedicated physical security team that is deployed 24/7 and allows SMUD to respond to emergent events in a safe, coordinated, efficient, and cohesive manner, protecting the lives of its employees, customers, community, properties and assets. SMUD has policies, processes and procedures in place that outline the access controls and restrictions for its properties. SMUD restricts access based on need as it determines, while adhering to applicable laws, regulations and standards such as NERC Reliability Standards and NRC regulations. SMUD also maintains a Utility Security Plan adopted by the Board representing SMUD’s compliance with the CPUC’s Safety and Enforcement Divisions six-step security plan process described in CPUC Decision 19-01-018.

During times of elevated, imminent threats, safety and/or security concerns, SMUD’s Security Operations team, under the direction of the Chief Financial Officer or delegate, reserves the right to deploy additional security measures, controls, and further restrict or limit access to its properties to increase its security posture.

SMUD operates a 24/7 security operations center which monitors and coordinates responses to situations reported by internal and external stakeholders, or which are detected by SMUD’s security technology. The technology includes access control, video surveillance, and various types of intrusion detection solutions. The security operations center is a central hub for initial contact for physical security calls from employees of suspicious events and initiates incident responses as needed.

Federal Legislation and Regulatory Proceedings

Energy Policy Act of 2005. On August 8, 2005, the Energy Policy Act of 2005 (the “EPAAct of 2005”) was signed into law. The law includes a number of energy-related provisions, including among other things limited FERC jurisdiction over interstate transmission assets of municipal utilities, cooperatives and federal utilities to order these entities to provide transmission services on rates and terms comparable to those the entities charge and provide to themselves; the grant of authority to FERC to establish and certify an electric reliability organization to develop and enforce reliability standards for users of the bulk power transmission system; and prohibitions of certain market practices including the provision of false information and related expansion of FERC civil and criminal penalty authority. So far, the most visible impact of the EPAAct of 2005 on SMUD has been the development of mandatory federal reliability standards.

Federal Regulation of Transmission Access. The Energy Policy Act of 1992 (the “Energy Policy Act”) made fundamental changes in the federal regulation of the electric utility industry, particularly in the area of transmission access. The Energy Policy Act provided FERC with the authority to require a transmitting utility to provide transmission services at rates, charges, terms and conditions set by FERC. The purpose of these changes, in part, was to bring about increased competition in the electric utility industry. Under the Energy Policy Act, electric utilities owned by municipalities and other public agencies which own or operate electric power transmission facilities which are used for the sale of electric energy at wholesale are “transmitting utilities” subject to the requirements of the Energy Policy Act.

Since the Energy Policy Act, FERC has adopted a series of rules to implement competitive open access to transmission facilities and regional transmission planning. Order No. 888, issued in 1996, requires the provision of open access transmission services on a nondiscriminatory basis by all “jurisdictional utilities” (which, by definition, does not include municipal entities like SMUD) by requiring all such utilities to file OATTs. Order No. 888 also requires “nonjurisdictional utilities” (which, by definition, does include SMUD) that purchase transmission services from a jurisdictional utility under an open access tariff and that owns or controls transmission facilities to provide open access service to the jurisdictional utility under terms that are comparable to the service that the nonjurisdictional utility provides itself. Section 211A of the EAct of 2005 authorizes, but does not require, FERC to order unregulated transmission utilities to provide transmission services, including rates and terms and conditions, that are comparable to those under which the unregulated transmitting utility provides transmission services to itself that are not unduly discriminatory or preferential.

In Order 890, issued in 2007, FERC stated that it will implement its authority under Section 211A on a case-by-case basis and retain the current reciprocity provisions.

In 2011, FERC issued Order 1000, which among other things requires public utility (jurisdictional) transmission providers to participate in a regional transmission planning process that produces a regional transmission plan and that incorporates a regional and inter-regional cost allocation methodology. Similar to Order 890, FERC states that it will implement its authority under Section 211A on a case-by-case basis. However, in Order 1000, FERC appears to expand upon the current reciprocity provisions and states that it has the authority to allocate costs to beneficiaries of services provided by specific transmission facilities even in the absence of a contractual relationship between the owner of the transmission facilities and the identified beneficiary.

SMUD, individually, and through the Large Public Power Council (“LPPC”), appealed Order 1000, but in 2014 the D.C. Circuit Court of Appeals rejected all of the arguments raised on appeal, upholding the entirety of Order 1000.

The jurisdictional members of WestConnect filed their proposed regional planning process and cost allocation methodology through a series of compliance filings at FERC. FERC accepted binding cost allocation for jurisdictional transmission providers of WestConnect and mandated that non-jurisdictional transmission providers (such as SMUD) identified as beneficiaries of a project have the ability to not accept the cost allocation. WestConnect’s Order 1000 planning process began with the 2016-2017 planning cycle.

However, in response to FERC’s WestConnect orders on compliance, El Paso Electric Company (“El Paso”), a jurisdictional transmission provider, petitioned to the Court of Appeals for the 5th Circuit. El Paso contends that FERC’s WestConnect orders violate Order 1000’s cost causation principle because WestConnect’s binding cost allocation applies only to the jurisdictional transmission providers and thus forces jurisdictional transmission providers to subsidize projects benefitting non-jurisdictional transmission providers that opt-out of projects. The non-jurisdictional transmission providers agreed on a settlement with the jurisdictional transmission providers to resolve the matters on appeal in the 5th Circuit, but FERC

ultimately did not accept the settlement. The court scheduled briefings and oral argument for the case, which took place April 3, 2023. A court decision is expected sometime later in 2023. In the meantime, SMUD continues to participate in the WestConnect process.

SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD's electric system or the electric industry generally. However, WestConnect has conducted planning cycles under its Order 1000 planning process and has not identified any project eligible for cost allocation. SMUD will continue to take any action necessary, including withdrawing from a cost allocation determination and engaging in FERC proceedings, to ensure that it is not required to pay for transmission costs in the absence of an agreement or service relationship.

Of note, on April 21, 2022, FERC issued a Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection (the "NOPR"). The NOPR seeks input on proposals that would impact the Order 1000 planning and cost allocation process. SMUD has been engaged in the proceeding, providing input and helping draft comments with trade organizations, including LPPC. FERC has not issued any subsequent order. SMUD will continue to monitor and be engaged in any developments at FERC that impact the Order 1000 process and its participation in WestConnect.

NERC Reliability Standards. The EAct of 2005 required FERC to certify an electric reliability organization ("ERO") to develop mandatory and enforceable reliability standards, subject to FERC review and approval. On February 3, 2006, FERC issued Order 672, which certified NERC as the ERO. Many reliability standards have since been approved by FERC, including those aimed at protecting the bulk electric system from physical and cyber threats.

The ERO or the regional entities, such as WECC, may enforce the reliability standards, subject to FERC oversight or FERC may independently enforce reliability standards. Potential monetary sanctions include fines of up to \$1,496,035 per violation per day. Order 693 provides ERO and regional entities with the discretion necessary to assess penalties for such violations, while also having discretion to calculate a penalty without collecting the penalty if circumstances warrant.

Anti-Market Manipulation Rules. EAct of 2005 gave FERC the authority to issue rules to prevent market manipulation in jurisdictional wholesale power and gas markets, and in jurisdictional transmission and transportation services. These anti-market manipulation rules apply to non-jurisdictional entities such as SMUD. Further, EAct of 2005 provided FERC civil penalty authority, which the Commission has stated that it will exercise carefully by assuring that its market manipulation rules are clear.

Greenhouse Gas Emissions. The United States Environmental Protection Agency (the "EPA") has taken steps to regulate GHG emissions under existing law. In 2007, the U.S. Supreme Court held that the Clean Air Act ("CAA") directed EPA to regulate GHG emissions from new motor vehicles if it judged that such emissions contribute to climate change. In 2009, EPA finalized an "Endangerment Finding" under the CAA, declaring that six identified GHGs – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride – cause global warming, and that global warming endangers public health and welfare. Subsequently, EPA promulgated GHG standards for passenger cars and light-duty trucks (the so-called "Tailpipe Rule"). Although that rulemaking was later withdrawn by a different administration, prompting litigation and re-proposal of the standards that has only recently been finalized, the original promulgation of the Tailpipe Rule required EPA to also address emissions of the same pollutants from other sources, namely, the electric sector.

In 2014, EPA issued a proposed rule under section 111(d) of the CAA called the Clean Power Plan (the "CPP") that projected power sector emissions reductions of 30% below 2005 levels by 2030. The

proposed CPP would have established a rate-based emissions goal for each state, providing states the responsibility to develop a State Implementation Plan (“SIP”) describing how each will meet the goal assigned by EPA using the “Best System of Emissions Reduction” (“BSER”) established by EPA. The BSER under the CPP featured a suite of emissions reduction measures including fuel switching, emissions trading, and other measures. Significantly for the State and its regulated entities, the proposed CPP included a “state measures” plan that allowed for continued operation of successful state programs that achieve CPP goals. The rule was finalized in October 2015.

In November 2015, 27 states and numerous corporations challenged the CPP in court, alleging that EPA had exceeded its authority under the CAA. The U.S. Supreme Court stayed implementation of the CPP pending disposition of the petitions for review in the D.C. Circuit and any subsequent review by the Supreme Court. The D.C. Circuit Court of Appeals held oral arguments on the petitioner’s claims, but before the court issued a decision, the 2016 presidential election resulted in a change of administration.

The new administration quickly moved for an abeyance (or stay) of the case for as long as the agency needed to review and withdraw the CPP. The court issued a series of 60-day abeyances and ultimately dismissed the case on September 17, 2019. Meanwhile, in August 2018, EPA proceeded to withdraw the CPP and proposed a different rule under the same provision of the CAA. The new rule, known as the Affordable Clean Energy (“ACE”) rule, would establish a BSER that only includes measures that can be undertaken at an individual power plant, rather than the broader suite of measures envisioned under the CPP. The ACE rule would also allow states to decide individually, on a case-by-case basis, the standards to be achieved by the best system of emission reductions, as well as exempt certain upgrades of fossil-fuel power plants from the CAA’s New Source Review program and extend the time to implement SIPs after the ACE rule is finalized. The ACE rule was challenged in court by environmental groups and states alleging that the revised rule inadequately responds to EPA’s responsibility to protect public health and welfare. SMUD joined in this litigation along with other challengers. The D.C. Circuit vacated the ACE rule on January 19, 2021, and remanded it to the EPA for review and revision, just days before a new presidential administration took office. Several states led by West Virginia and coal industry members appealed the decision.

In June 2022, the U.S. Supreme Court issued its opinion in *West Virginia v. EPA*, striking down the CPP and foreclosing any future regulations of “significant political and economic significance” if Congress has not expressly authorized them. While the decision does not restrict EPA to only requiring measures “inside the fence line” at an individual power plant to control GHGs, it appears unlikely that the EPA will be able to require material reductions in GHGs to mitigate climate change through section 111(d) of the CAA.

Federal Clean Energy Legislation. SMUD actively participates in discussion at the federal level regarding legislation that would meaningfully impact SMUD’s existing GHG reduction strategies or impose new requirements for electric generators, including a proposed federal clean energy standard. In the 117th Congress, a clean electricity performance program was considered but ultimately lacked support to pass. Instead, Congress extended and expanded clean energy tax credits and created new grant and rebate programs to incentivize clean energy investments in the Inflation Reduction Act of 2022. While it is possible that a future Congress may revisit the concept of a clean energy standard or other GHG reduction regime, it is possible that the passage of the Inflation Reduction Act will diminish the likelihood of a new regulatory framework being enacted in the near future.

SMUD is unable to predict whether any new EPA rulemakings will be undertaken, and what the full impact of the reduction of fossil-based generation over time will have on the operations and finances of SMUD’s electric system or the electric utility industry generally.

State Legislation and Regulatory Proceedings

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills provide for reduced GHG emission standards and greater investment in energy efficient and environmentally friendly generation alternatives through more stringent RPS. Additionally, ongoing regulatory proceedings address water flow and quality issues related to the Sacramento – San Joaquin River Delta. The following is a brief summary of these bills and regulatory proceedings.

Greenhouse Gas Emissions. On September 27, 2006, the Governor of the State signed into law AB 32, the Global Warming Solutions Act of 2006 (“AB 32”). AB 32 requires the California Air Resources Board (“CARB”) to adopt enforceable GHG emission limits and emission reduction measures in order to reduce GHG emissions to 1990 levels by 2020. In addition, AB 32 establishes a mandatory reporting program for all IOUs, local, publicly-owned electric utilities and other load-serving entities (electric utilities providing energy to end-use customers) (“LSEs”). The AB 32 reporting program allows CARB to adopt regulations using market-based compliance mechanisms such as a “cap-and-trade” system.

On December 16, 2010, CARB approved a resolution adopting cap-and-trade regulations for the State. The regulations became effective on January 1, 2012. As adopted, the cap-and-trade program covers sources accounting for 85% of the State’s GHG emissions, the largest program of its type in the United States.

The cap-and-trade program has been implemented in phases. The first phase of the program (through December 31, 2014) introduced a hard emissions cap on the combined electric utility and large industrial sectors, covering all sources emitting more than 25,000 metric tons of carbon dioxide-equivalent greenhouse gases (“CO₂e”) per year. In 2015, the program was expanded to cover distributors of transportation, natural gas, and other fossil fuels. The cap declined about 2 percent in 2014, and declined 3 percent annually from 2015 to 2020. The cap-and-trade program requires covered entities to retire compliance instruments (allowances and carbon offsets) for each metric ton of CO₂e they emit. Initially, CARB allocated free allowances to LSEs and most industrial facilities at roughly 90% of their average emissions. SMUD was granted a higher amount because of early action taken to reduce GHG emissions. In the case of electric utilities, the value of allowances must be used to benefit ratepayers and achieve GHG emission reductions. As the program matures, some covered entities will be required to buy an increasing portion of their allowances at auction or on the secondary market. The cap-and-trade program also allows covered entities to use offset credits for compliance purposes (not exceeding 8% of a regulated entity’s compliance obligation through 2020, 4% from 2021 through 2025, and 6% from 2026 through 2030). Offsets must be obtained from certified projects in sectors that are not regulated under the cap-and-trade program and are subject to other restrictions.

In November of 2012, CARB conducted its first allowance auction and auctions now occur on a quarterly schedule. On January 1, 2014, CARB linked the State cap and trade program with a companion program in the Canadian province of Quebec. The first quarterly joint auction for the linked programs occurred in November, 2014. On January 1, 2018, CARB linked the State’s cap-and-trade program with a companion program in the Canadian province of Ontario. Immediately thereafter, an entity in any one of the three jurisdictions was able to purchase allowances on the secondary market in a linked jurisdiction, and as of February 21, 2018 (the date of the first joint auction) could purchase allowances in the joint auction. In June 2018, elections in Ontario changed political parties and the new administration formally withdrew from the Cap-and-Trade linkage. CARB has limited purchase and use of Ontario allowances in response. The August 2018 Cap and Trade auction did not include Ontario. In 2021, the Washington state legislature passed a Cap-and-Trade bill, which [is expected to] interact with the State’s markets. Future potential near-term links to the CARB cap-and-trade program also include the states of Oregon, which has

adopted a cap and trade program, and New Mexico, which is considering the adoption of a cap and trade program.

On October 7, 2015, the Governor of the State signed SB 350 that contained aggressive goals for reducing carbon emissions by 2030, including raising the proportion of renewable energy to 50%, reducing the use of petroleum fuel in cars and trucks by up to 50%, and doubling the energy efficiency of existing buildings. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*” for additional information. In addition, SB 350 established requirements for larger POU’s to adopt (by January 1, 2019) and file with the CEC Integrated Resource Plans (“IRPs”) by April 2019 that would show planned procurement to achieve the 50% RPS and State GHG goals established by CARB. The CEC developed “guidelines” for these IRPs for POU’s in 2017, updated them in 2018, and proposed additional updates in 2022. CARB established specific GHG target ranges for these IRPs in summer 2018, with SMUD’s planning target set at 1.1 – 1.9 million metric tons of emissions. SMUD developed and adopted an IRP in 2018 through a comprehensive public process and filed the adopted IRP with the CEC in April 2019. SMUD adopted an updated IRP in June 2022 and filed the updated IRP with the CEC in September 2022. SMUD’s updated IRP plans for a greater than 92% reduction in GHG emissions by 2030 relative to 1990 levels, which equals approximately 250,000 metric tons of GHG emissions in 2030. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*.”

On April 29, 2015, the Governor of the State signed Executive Order B-30-15, establishing a goal for the State to reduce GHG emissions to 40% below 1990 levels by 2030. In 2016, the State Legislature passed Senate Bill 32 (“SB 32”), which codified Governor Brown’s goal of reducing the State’s GHG emissions to 40% below 1990 levels by 2030. In 2017, the State Legislature passed Assembly Bill 398 (“AB 398”), explicitly authorizing the continuation of the cap and trade program, with designated changes, through 2030. Subsequently, CARB adopted an initial set of regulatory changes extending the Cap-and-Trade program, including establishing utility sector allowance allocations through 2030. In 2018, CARB completed a rulemaking to implement the cap-and-trade program changes designated by AB 398. These changes include development of a hard price ceiling for the cap-and-trade program and two price-containment points below that ceiling, in an attempt to ensure stable prices in the program. CARB adopted final regulations on December 13, 2018.

In December 2022, CARB approved the agency’s 2022 Scoping Plan, a roadmap to reducing GHG emissions by 85% and achieving economy-wide carbon neutrality by 2045. The Plan does not impose new mandates, but calls for state policymakers and regulatory agencies to implement programs and policies that support the Plan’s goals. In 2023, CARB signaled that they would reopen regulations that govern several programs that SMUD participates in, including Cap and Trade, to align them with the goals set forth in the Scoping Plan. SMUD will monitor and, as appropriate, participate in these forthcoming regulatory proceedings.

In addition, any new projects constructed in the State, including power plants, that may cause a significant adverse impact on the environment must be analyzed under CEQA. Some State agencies have begun using CEQA in novel ways to require mitigation of “significant” GHG emissions caused, either directly or indirectly, by a project. Pursuant to Senate Bill 97 passed in 2007, CARB will assist the Governor’s Office of Planning and Research in setting thresholds of significance under CEQA of GHG impacts from new projects. This is an area of State law that is evolving and untested in the courts. However, there is a risk that any project proponent of an electric system infrastructure project might have to mitigate such potential impacts to a level of less than significance.

On December 3, 2012, the Superior Court issued a ruling in *Cleveland National Forest Foundation v. San Diego Association of Governments* (“SANDAG”), Case No. 2100-00101593, that sided with the

State Attorney General and the other petitioners stating that SANDAG did not follow CEQA when it adopted a \$257 billion regional transportation plan in 2011. The ruling expressly invalidated the certification of the Environmental Impact Report (“EIR”) on the grounds that the EIR should have analyzed the plan’s consistency with the governor’s policy goal to reduce GHG emissions by 80% by 2050 as articulated in the 2005 Executive Order S-03-05. On November 24, 2014, the Fourth Appellate District upheld the trial court in a published decision, and SANDAG appealed to the State Supreme Court. On July 13, 2017, the Supreme Court reversed and held that SANDAG’s decision not to adopt the 2050 goal was not an abuse of discretion. Nevertheless, the Court articulated three clear principles for agencies to follow in their CEQA review of planning documents: 1) agencies must take seriously the significance of even small increases in GHG emissions; 2) they must consider science-based State policy guidance in their decision-making; and 3) they are required to use the best scientific information available to determine whether their planning decisions are consistent with the State’s goals. These principles will apply to SMUD in CEQA reviews of future projects.

On September 29, 2006, the Governor of the State signed into law Senate Bill 1368 (“SB 1368”), the GHG Emissions Performance Standard (“EPS”). SB 1368 limits long-term investments in baseload generation by the State’s utilities to power plants that meet an EPS jointly established by the CEC and the CPUC. The agencies have set the EPS at 1,100 pounds CO₂ per MWh, which is roughly half of the CO₂ emissions rate of a conventional coal-fired power plant. CEC regulations to implement the law for POU’s were approved by the Office of Administrative Law on October 16, 2007.

SMUD’s primary supply and demand-side resource needs to meet customers’ electricity usage patterns over the next 10 years are for peaking resources. Currently there is a ban in the State that prohibits the development of nuclear power plants until there is a permanent storage solution for spent fuel rods. With the effective ban on new coal power imports under SB 1368, natural gas-fired, combined cycle power plants would appear to be the primary viable option for fossil fuel-based baseload power plant development absent the implementation of new technologies in connection with other resource options. The reliance on a single fuel source will continue to put pressure on the natural gas market in the United States. SMUD has in place a natural gas procurement plan to mitigate natural gas volatility, see “POWER SUPPLY AND TRANSMISSION – Fuel Supply” above.

On September 16, 2022, the Governor of the State signed into law SB 1158, which requires every retail supplier of electricity to annually report hourly greenhouse gas emissions. The California Energy Commission will establish a process by July 1, 2024, and the implementation date is 2028.

Also on September 16, 2022, the Governor of the State signed into law SB 1020, which creates interim climate targets under which eligible renewable energy resources and zero-carbon resources must supply 90% of all retail sales of electricity to California end-use customers by December 31, 2035, and 95% by December 31, 2040. The bill also requires each State agency to ensure that zero carbon resources and eligible renewable energy resources supply 100 percent of electricity procured on its behalf by December 31, 2035. SMUD provides electricity to a number of State agency buildings and will work with State agencies to comply with this requirement.

Reliability. On June 30, 2022, the Governor signed the 2022-23 budget, along with a number of trailer bills, which provide implementing details on the budget line items. Included in AB 205, the energy trailer bill, are a number of reliability programs.

1. CEC Distributed Electricity Backup Assets Program to incentivize the construction of cleaner and more efficient distributed energy assets that would serve as on-call emergency supply or load reduction for the state’s electrical grid during extreme events.

2. CEC Demand Side Grid Support Program to pay customers to reduce demand during stressed grid events this summer. SMUD is actively engaging the CEC on the development of this program.
3. DWR Strategic Reliability Reserve to secure resources for summer reliability or to preserve the option to extend the life of facilities that otherwise would retire, new temporary generators of more than 5 megawatts (MWs), new energy storage systems of at least 20 MWs, generation facilities that use lean, zero-emission fuel technologies, or new zero-emission technologies that can be operational by December 31, 2026.

Energy Efficiency. Senate Bill 1037 (“SB 1037”), signed by Governor Schwarzenegger on September 29, 2005, requires that each municipal electric utility, including SMUD, prior to procuring new energy generation resources, first acquire all available energy efficiency, demand reduction and renewable resources that are cost effective, reliable and feasible. SB 1037 also requires each municipal electric utility to report annually to its customers and to the CEC its investment in energy efficiency and demand reduction programs. Further, State Assembly Bill 2021 (“AB 2021”), signed by the Governor on September 29, 2006 requires that the publicly owned utilities establish energy efficiency and demand reduction targets and report and explain the basis of the targets beginning June 1, 2007 and every three years thereafter for a ten year horizon. Future reporting requirements as set forth in AB 2021 include: (i) the identification of sources of funding for the investment in energy efficiency and demand reduction programs, (ii) the methodologies and input assumptions used to determine cost effectiveness, and (iii) the results of an independent evaluation to measure and verify energy efficiency savings and demand reduction program impacts. The information obtained from local publicly owned utilities will be used by the CEC to present the progress made by the publicly owned utilities on the State’s goal of reducing electrical consumption by 10% in ten years and amelioration with the GHG targets presented in Executive Order S-3-05 enacted by the Governor of the State on June 1, 2005.

In response to SB 1037 and AB 2021, SMUD established a specific goal of reducing energy consumption by 15% by 2018 and adopted annual targets for gigawatt hour and megawatt savings. SMUD revisits its energy efficiency goals and programs on a regular basis to ensure compliance with State policies established by SB 1037 and AB 2021 (as modified by SB 350).

SB 350 (passed in 2015) requires the CEC to develop statewide energy efficiency targets for 2030 aimed at doubling the achieved savings, and requires POU’s to establish efficiency targets that are “consistent” with those targets. In 2017, the CEC developed a report on the doubling of energy efficiency targets required by SB 350. Both SB 350 and the CEC report contemplate the use of fuel substitution to meet energy efficiency targets and have a strong focus on carbon reduction. In response, SMUD developed a methodology and carbon tool to count fuel substitution, namely switching natural gas end-uses to efficient electric end uses and measuring savings in carbon emissions. SMUD presented its methodology to the joint state agency working group known as the Fuel Substitution Working Group several times in 2019 and adopted a carbon-based metric in early 2020 to guide overall SMUD carbon targets. This goal is expected to facilitate substantial expansion of building electrification and result in more than double the overall amount of energy efficiency being delivered per year, when measured on a carbon reduction basis. The vast majority of this energy efficiency (more than 85%) is expected to be delivered through efficient electrification by 2030.

Also passed in 2015 was AB 802. This bill directed the CEC to develop a State-wide building energy use benchmarking and public disclosure program for those buildings greater than 50,000 square feet. As set forth in regulations adopted by the CEC, building owners are required to report building characteristic information and energy use data each year. The reporting began in 2018 for buildings without residential utility accounts and in 2019 for buildings with 17 or more residential utility accounts. Energy utilities must provide building-level energy use data to building owners upon request.

In order to support the implementation of SB 350 and AB 802, the CEC opened a rulemaking to amend its Title 20 Data Collection regulations, resulting in an expansion of customer data utilities must report to the CEC. The CEC adopted regulations pursuant to the rulemaking in February 2018, and the regulations were approved and went into effect in the Summer of 2018. SMUD has made several data filings under the new regulations. In 2020, the CEC opened a second phase of Data Collection rulemaking to amend regulations necessary to develop the policy reports and analysis as required by statute to assist in the CEC's energy forecasting and assessment activities. The OAL approved the codifying of the regulations from that proceeding on December 30, 2021.

Electric Transportation Mandates Executive Order B-48-18, enacted January 2018, ordered all state entities to work with the private sector and all appropriate levels of government to put at least 5 million zero-emission vehicles on California roads by 2030, as well as 250,000 zero-emission vehicle chargers by 2025.

In September 2020, Governor Newsom signed Executive Order N-79-20 to accelerate actions to mitigate and adapt to climate change, and to more quickly move toward a low-carbon, sustainable and resilient future. Executive Order N-79-20 states the goal of 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035 and 100 percent of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks.

CARB has proposed or adopted a suite of regulations to support these State policies, including the Zero Emission Forklift Regulation, Advanced Clean Trucks Rule (the "ACT Rule"), Advanced Clean Cars II ("ACC II"), and the Advanced Clean Fleets Rule (the "ACF Rule"). The ACT Rule and ACC II establish increasing zero-emission vehicle ("ZEV") sales requirements for truck and light-duty vehicle manufacturers, respectively. The ACT Rule, which took effect in March 2021, requires that by 2035, at least 55% of Class 2b-3 truck sales are ZEVs, at least 75% of Class 4-8 straight truck sales, and 40% of truck tractor sales. ACC II, which took effect in November 2022, requires that 100% of light-duty passenger car, truck, and SUV sales in California be ZEV by the 2035 model year.

CARB is expected to adopt the ACF Rule in 2023. The proposed ACF Rule would establish ZEV purchase and fleet composition requirements for on-road medium- and heavy-duty ("MHD") fleets in California. Under the proposed ACF Rule, public fleets like SMUD would have two compliance options. The first is a ZEV purchase requirement: 50% of annual MHD vehicle purchases would need to be ZEVs starting in 2024, and 100% starting in 2027. The second is the optional ZEV milestone option, under which the composition of the MHD fleet meets certain ZEV percentages over time, which would provide SMUD with considerably greater compliance flexibility. The proposed ACF Rule would also accelerate the manufacturer ZEV sales requirement to 100% of all MHD truck sales by the 2036 model year.

Additionally, CARB is developing a regulation to drive greater deployment of zero-emission forklifts within fleets throughout the State. This Zero-Emission Forklift Regulation is scheduled for CARB consideration in 2023.

Increases in ZEV adoption and deployment will result in increased customer usage of electricity. The ACF Rule would also require SMUD, as a fleet owner, to transition SMUD's MHD fleet to ZEVs.

Rooftop Solar Mandate. In February, 2018, the CEC approved updates to the 2019 Building Energy Efficiency Standards to require installation of rooftop photovoltaic solar systems for residential buildings under three stories constructed starting in 2020, with an option to satisfy the requirement through community shared solar electric generation or battery storage systems. This "Community Solar" compliance mechanism permits a program administrator, such as a utility, to provide solar power to participating residential customers instead of rooftop solar. SMUD submitted an application to the CEC to

be a program administrator of SMUD's Community Solar program, Neighborhood SolarShares, in 2019, and the CEC approved SMUD's application in February 2020. In 2021, the CEC revised the Community Solar provisions in the 2022 Building Energy Efficiency Standards to include an "opt-out" provision, which will impact the design and implementation of SMUD's Neighborhood SolarShares program. SMUD updated its Neighborhood SolarShares program materials to incorporate the 2022 revisions, which took effect in January 2023, and has received approval from the CEC to continue serving as a program administrator. See also "BUSINESS STRATEGY – Serving SMUD's Customers – *Renewable Options.*"

Renewables Portfolio Standard. Senate Bill 100 was passed by the Legislature and approved by Governor Brown on September 10, 2018. The bill sets a 50% RPS target for 2026 and sets compliance period targets at 44% by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. The bill also creates a statewide planning goal to meet all of the state's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045.

Load Management Standards. Sections 25213, 25218(e) and 25403.5 of the Public Resources Code mandate and authorize the CEC to adopt rules and regulations to reduce the uneconomic and unnecessary consumption of energy and to manage energy loads, or demand, to help maintain electrical grid reliability. The original Load Management Standards ("LMS") regulations were adopted in 1979 and required the implementation of marginal cost pricing industrial time-of-use rates, and residential load control programs. In October 2022, the CEC adopted an update to the LMS regulations to require the largest electric service providers in California (including SMUD) to develop retail electricity rates that change at least hourly to reflect locational marginal costs and submit those rates to the utility's governing body for approval. The LMS proposes the following: a) voluntary hourly or sub-hourly rates for each customer class or b) a cost-effective program, to be implemented by the utilities by January 2026. The effective date of the LMS regulation is April 1, 2023. The LMS regulations are intended to increase efficiency and demand flexibility in California's electricity grid. SMUD's Pricing team is leading SMUD's LMS implementation work, including the development of a Compliance Plan to be submitted to SMUD's Board by the fourth quarter of 2023 and then to the CEC.

Energy Storage Systems. In September 2010, the State Legislature enacted, and the Governor signed into law, Assembly Bill 2514 ("AB 2514"). On or before March 1, 2012, the governing board of each POU was required to initiate a process to determine appropriate targets, if any, for the utility to procure viable and cost-effective energy storage systems to be achieved by December 31, 2016, and December 31, 2020. The bill required each POU to report certain information to the CEC. In 2014, SMUD set a 0 MW target for 2017, and in 2017 set a 9 MW target for 2020. In 2018, SMUD identified a potential need for 246 MW of storage by 2030. Following SMUD's 2020 compliance report to the CEC in January 2021, going forward SMUD will evaluate and report energy storage planning as part of its IRP update at least once every five years. See also "BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Energy Storage Systems.*"

Sacramento-San Joaquin River Bay-Delta Processes. The Sacramento-San Joaquin River Delta is an expansive inland estuary, formed at the western edge of the California Central Valley by the confluence of the Sacramento and San Joaquin rivers ("Delta"). There are two substantial Delta planning processes with the potential to affect (1) energy available for SMUD's purchase from the Central Valley Project ("CVP") and (2) flows within the Upper American River watershed. These processes are called the Bay-Delta Water Quality Control Plan ("Bay-Delta Plan") and the Delta Conveyance Project.

The Bay-Delta Water Quality Control Plan is updated periodically by the State Water Resources Control Board ("SWRCB"), the last time being in 2006. The current Bay-Delta Plan update process is being implemented in four phases. The first phase considered southern Delta water quality, with a significant focus on San Joaquin River tributaries. Phase 2, which is initially being addressed by a

document under development by SWRCB staff, will address Sacramento River tributaries and various flow related issues, including the critically important one of those tributaries' contribution to Delta outflow. Phase 3 will concern changes to water rights needed to implement Phase 2. A substantial change in Delta outflow requirements could have a major impact on the timing of hydroelectric energy generation by the CVP. SMUD has a long-term agreement with WAPA to purchase some of this power (see "POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – *Western Area Power Administration*"). On July 18, 2018, the SWRCB released an updated Framework document signaling its staff's intent to propose Delta outflow requirements of 45–65% unimpaired flows for the Sacramento River tributaries (which includes the American River, the upper portions of which are where the UARP sits), though the report will analyze requirements of 35–75%. If these criteria were implemented, they could cut CVP generation by 50 to 63%. Governor Newsom has urged the SWRCB, other agencies and affected parties to execute voluntary agreements to address species' needs and outflow requirements. Although the negotiations have been slow, it is expected they will eventually result in a reasonable compromise. If the agreements do not come to fruition, SMUD plans to fully participate in all regulatory and legal proceedings to argue for consideration and minimization of impacts to hydropower generation. SMUD will assess the potential impacts of proposed modifications to the present outflow objectives on SMUD's operations once the SWRCB makes those available.

In July 2022, the State Department of Water Resources ("DWR") released a Draft Environmental Impact Report ("EIR") to evaluate the potential impacts of carrying out the Delta Conveyance Project; the U.S. Army Corps of Engineers released a separate Environmental Impact Statement to evaluate the effects of the Project pursuant to the National Environmental Policy Act. The Delta Conveyance Project is expected to entail construction of two intakes on the Sacramento River that will carry water to a main tunnel to the California Aqueduct for delivery south of the Delta. The Delta Conveyance Project may pose the potential to exacerbate impacts to already imperiled aquatic species, and in turn could have indirectly prompted regulatory agencies to require third parties, such as SMUD, to compensate by making changes to their operations. The Bureau of Reclamation is not a party to the Delta Conveyance Project, which should eliminate the potential for CVP power to be used to supply Delta Conveyance Project pumps. SMUD will monitor the proceedings and participate as necessary to ensure any impacts to SMUD interests are minimized.

Proposition 26. Proposition 26 was approved by the electorate on November 2, 2010 and amends Article XIII A and Article XIII C of the State Constitution. Proposition 26 imposes a two-thirds voter approval requirement for the imposition of fees and charges by the State, unless the fees and charges are expressly excluded. It also imposes a majority voter approval requirement on local governments with respect to fees and charges for general purposes, and a two-thirds voter approval requirement with respect to fees and charges for special purposes, unless the fees and charges are expressly excluded. The initiative, according to its supporters, is intended to prevent the circumvention of tax limitations imposed by the voters pursuant to Proposition 13, approved in 1978, and other measures through the use of non-tax fees and charges. Proposition 26 expressly excludes from its scope a charge imposed for a specific local government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable cost to the local government of providing the service or product. Proposition 26 is not retroactive as applied to local governments. Although SMUD believes that the initiative was not intended to apply to fees for utility services such as those charged by SMUD and its fees and charges meet the criteria of the exclusion described above, it is possible that Proposition 26 could be interpreted to further limit fees and charges for electric utility services and/or require stricter standards for the allocation of costs among customer classes. SMUD is unable to predict at this time how Proposition 26 will be interpreted by the courts or what its ultimate impact will be. As of the date of this Official Statement, SMUD is unaware of any fees or charges relating to SMUD's service that would have to be reduced or eliminated because of Proposition 26. However, certain of SMUD's adopted rate increases have been challenged. See "LEGAL PROCEEDINGS – Proposition 26 Lawsuit."

Wildfire Legislation. In September 2016, Governor Brown signed into law Senate Bill 1028 (“SB 1028”), which requires POU’s (including SMUD), IOUs, and electrical cooperatives to construct, maintain and operate their electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by electrical lines and equipment. SB 1028 also requires the governing board of POU’s to make an initial determination whether any portion of that geographical area has a significant risk of catastrophic wildfire resulting from those electrical lines and equipment, based on historical fire data and local conditions, and in consultation with the fire departments or other entities responsible for control of wildfires within the geographical area.

Senate Bill 901 (“SB 901”), signed into law in September 2018 by Governor Brown, further addresses response, mitigation and prevention of wildfires. The bill requires POU’s, including SMUD, before January 1, 2020, and annually thereafter, to prepare a wildfire mitigation plan and present it in a public meeting to their governing board. SB 901 requires POU’s to accept comments on the wildfire mitigation plan from the public, other local and State agencies, and interested parties, and to verify that the plan complies with all applicable rules, regulations, and standards, as appropriate. The bill requires a qualified independent evaluator to review and assess the comprehensiveness of its wildfire mitigation plan and present its report to the board in a public meeting.

In 2019, Governor Newsom released his comprehensive strategy on wildfires, laying the groundwork for legislative discussions on utility wildfire liability and allocating costs associated with catastrophic wildfires, among other things. While the Governor supported a modification of State’s current inverse condemnation doctrine, under which utilities are held liable for wildfire damage without regard to the fault of the utility, no bill was introduced. AB 1054 (Holden) did pass in 2019 that included several provisions for solvent investor owned utilities, including the development of a fund to help pay victim claims for utility ignited wildfires. The bill also created a new Wildfire Safety Division within the CPUC to prioritize wildfire safety throughout the State, and established an appointed Wildfire Safety Advisory Board to advise and make recommendations relating to wildfire safety to this new Division. For POU’s, the bill requires submittal of annual wildfire mitigation plans to the Advisory Board for review and advisory opinions.

Senate Bill 247 (“SB 247”), signed by Governor Newsom on October 2, 2019, establishes notification, audit and reporting guidelines for electrical corporations relating to vegetation management requirements in the wildfire mitigation plan. SB 247 also specifies the qualifications for electrical line clearance tree trimmers performing work to comply with the vegetation management requirements in an electrical corporation’s wildfire mitigation plan and requires that qualified line clearance tree trimmers be paid no less than a specified prevailing wage rate. POU’s are not required to adhere to SB 247, but the market impacts are projected to significantly increase SMUD’s annual vegetation management costs.

Nonstock Security. SMUD sponsored legislation in 2019, Assembly Bill 689, which was signed into law by Governor Newsom on September 5, 2019. This bill expressly allows SMUD the ability to operate a pilot project (effective January 1, 2020, to January 1, 2025), of up to three acquisitions, to hold nonstock security in a corporation or other private entity if acquired as part of a procurement of goods or services from that entity, provided that no separate funding is expended solely for the nonstock security. This will allow SMUD to realize the financial benefits of its investments, partnerships, and intellectual property.

On September 15, 2022, the Board authorized the CEO & GM to enter into a joint collaboration agreement with ESS Tech, Inc. (“ESS”). Under that agreement SMUD would procure from ESS iron flow batteries for utility scale long-duration energy storage applications. The agreement contemplates a multi-year phased deployment of up to 200MW/2GWh of long duration energy storage by 2028. As part of that procurement, SMUD acquired nonstock security in ESS.

Future Regulation

The electric industry is subject to continuing legislative and administrative reform. States and Federal entities routinely consider changes to the way in which they regulate the electric industry. Recently, both further deregulation and forms of additional regulation have been proposed for the industry, which has been highly regulated throughout its history. SMUD is unable to predict at this time the impact any such proposals will have on the operations and finances of SMUD or the electric utility industry generally.

OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

CAISO Market Initiatives

The CAISO routinely conducts a number of initiatives and stakeholder processes that propose certain operational and market changes that impact SMUD. SMUD does and will continue to monitor the various initiatives proposed by the CAISO and participate in its stakeholder processes to ensure that its interests are protected.

SMUD participates in the CAISO market for only a small percentage of energy needs, however, it continues to benefit from its participation in the CAISO's WEIM and is currently exploring further participation in the CAISO's proposed Extended Day Ahead Market ("EDAM") (both the WEIM and EDAM are described further below). Along with monitoring other key market initiatives at the CAISO which impact wholesale energy markets, SMUD will continue to actively participate in all processes related to EIM and EDAM, to ensure both participation models are beneficial to SMUD's customers. Given its success in EIM and active engagement with the CAISO and CAISO leadership, SMUD has earned a key role in the stakeholder processes related to these important and evolving markets.

Resource Adequacy Filing

In September 2005, the State Legislature enacted and the Governor signed into law Assembly Bill 380 ("AB 380"), which requires the CPUC to establish resource adequacy requirements for all LSEs within the CPUC's jurisdiction. In addition, AB 380 requires publicly owned utilities, including SMUD, to meet the most recent resource adequacy standard as adopted by the WECC. In October 2005, the CPUC issued a decision stating that LSEs under its jurisdiction would be required, by June 2006, to demonstrate that they have acquired capacity sufficient to serve their forecast retail customer load plus a 15-17% planning reserve margin. In March 2021, the CPUC issued a decision requiring the three largest investor owned utilities (PG&E, Southern California Edison, and San Diego Gas & Electric) to target a minimum of 2.5% of incremental resources for their planning reserve margin for 2021 and 2022. Subsequently, in December 2021, the CPUC issued another decision that increased the investor-owned utilities' minimum target by an additional 2.5-5% of incremental resources for 2022 (which creates an effective planning reserve margin of 20-22%) and extended this target to 2023. And in June 2022, the CPUC issued a decision adopting a planning reserve margin of 16% for 2023, and 17% for 2024, for all LSEs under its jurisdiction. The WECC has yet to formally adopt a resource adequacy requirement. However, consistent with current WECC practices, SMUD utilizes a 15% planning reserve margin when assessing the need for future resources.

Western Energy Imbalance Market and Extended Day Ahead Market

Federal and state policymakers have long-promoted the development of organized markets in the west as a means (among other reasons) to better integrate intermittent renewable resources into the electric system, the first of which markets is the Western EIM, operated by the CAISO. The CAISO successfully launched the WEIM, a real time only imbalance market, on October 1, 2014, with PacifiCorp as the first participant. Since this time, the WEIM has grown significantly with the additions of NV Energy, Arizona

Public Service, Puget Sound Energy, Portland General Electric, Idaho Power, Powerex, BANC, the Salt River Project, Seattle City Light, the Turlock Irrigation District, the Los Angeles Department of Water and Power, NorthWestern Energy, the Public Service Company of New Mexico, Avista, Tacoma Power, Bonneville Power Administration, and Tucson Electric Power. Additionally, the WEIM footprint will continue to expand further in 2023 with the additions of Avangrid, WAPA Desert Southwest Region, and El Paso Electric. SMUD expects the WEIM to comprise a significant portion of the Western Interconnection in 2023.

To date, participation in the WEIM by SMUD has shown significant financial and operational benefits, in addition to furthering an already favorable working partnership between SMUD and the CAISO to develop solutions to integrate renewable resources in support of carbon reduction goals.

BANC's participation not only signaled the first public power participant in the EIM, but it was also implemented utilizing a unique phased approach, with SMUD (as the largest member of BANC) implementing so-called WEIM Phase 1 in 2019, while the other BANC members and WAPA (the "Phase 2 Parties") joined after further evaluation and approvals in March of 2021.

Part of the BANC Phase 2 participation included reimbursement to SMUD certain upfront infrastructure costs incurred by SMUD in Phase 1 to establish BANC as an WEIM Entity. This reimbursement to SMUD by the Phase 2 Parties has been completed.

The CAISO and WEIM participants, including SMUD and BANC, have participated in developing a design framework to extend the successful WEIM real time framework to the EDAM. Like WEIM, EDAM would broaden the access to regional resources for the reliable integration of renewable resources, only over a longer (day ahead) time horizon by allowing for a more economic and efficient optimization of regional resources by providing grid operators greater time (day ahead as opposed to real time) to commit or decommit units based on market price signals. Only participants in the WEIM will be allowed to extend their participation to EDAM. The CAISO launched a public stakeholder initiative and utilized most of 2022 developing the EDAM design. On February 1, 2023 the CAISO Board of Governors and EIM Governing Body approved the EDAM proposal. Tariff development, regulatory approvals and implementation activities will take place in 2023 and 2024, with expected market go-live first quarter 2025. SMUD (and BANC) will likely need to consider its participation before 2024 if it wishes to on-board in time for the first phase of EDAM participation in 2025. Similar to the process around WEIM participation, SMUD, along with BANC, are performing cost-benefit studies to ensure EDAM participation will expand on the existing WEIM benefits prior to seeking approvals to proceed.

PG&E Bankruptcy

On January 14, 2019, PG&E and its parent company, PG&E Corporation, announced their intention to file, on or about January 29, 2019, for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code (the "Bankruptcy Code") mainly as a result of wildfire liability claims and exposure. On January 29, 2019, PG&E and PG&E Corporation filed for bankruptcy protection under Chapter 11 of the Bankruptcy Code (the "Bankruptcy Code"). On May 28, 2020, the CPUC approved PG&E's Plan of Reorganization. On June 20, 2020 the United States Bankruptcy Court for the Northern District of California confirmed PG&E's Plan of Reorganization. SMUD does not anticipate any material impacts to SMUD in connection with PG&E's Plan of Reorganization.

In addition, other electric utilities, including the other major IOUs in the State, Southern California Edison and San Diego Gas & Electric Company, have experienced credit rating downgrades as a result of potential wildfire liabilities exposure, which may have implications for the electric market generally.

Other Factors

The electric utility industry in general has been, or in the future may be, affected by a number of other factors which could impact the financial condition and competitiveness of many electric utilities and the level of utilization of generating and transmission facilities. In addition to the factors discussed above, such factors include, among others, (a) effects of compliance with rapidly changing environmental, safety, licensing, regulatory and legislative requirements other than those described above; (b) changes resulting from conservation and demand side management programs on the timing and use of electric energy; (c) changes resulting from a national energy policy; (d) effects of competition from other electric utilities (including increased competition resulting from mergers, acquisitions, and “strategic alliances” of competing electric and natural gas utilities and from competitors transmitting less expensive electricity from much greater distances over an interconnected system) and new methods of, and new facilities for, producing low cost electricity; (e) the repeal of certain federal statutes that would have the effect of increasing the competitiveness of many IOUs; (f) increased competition from independent power producers and marketers, brokers and federal power marketing agencies; (g) “self-generation” or “distributed generation” (such as solar, microturbines and fuel cells) by industrial and commercial customers and others; (h) issues relating to the ability to issue tax exempt obligations, including severe restrictions on the ability to sell to nongovernmental entities electricity from generation projects and transmission service from transmission line projects financed with tax exempt obligations; (i) effects of inflation on the operating and maintenance costs of an electric utility and its facilities; (j) changes from projected future load requirements; (k) increases in costs and uncertain availability of capital; (l) issues relating to supply chains and the uncertain availability or increased costs of necessary materials; (m) shifts in the availability and relative costs of different fuels (including the cost of natural gas); (n) sudden and dramatic increases in the price of energy purchased on the open market that may occur in times of high peak demand in an area of the country experiencing such high peak demand, such as has occurred in the State; (o) issues relating to risk management procedures and practices with respect to, among other things, the purchase and sale of natural gas, energy and transmission capacity; (p) other legislative changes, voter initiatives, referenda and statewide propositions; (q) effects of changes in the economy; (r) effects of possible manipulation of the electric markets; (s) natural disasters or other physical calamities, including, but not limited to, earthquakes, droughts, severe weather, wildfires and floods; (t) changes to the climate, including increasing volatility in rainfall in the Western United States and a reduction in the depth and duration of the Sierra snowpack; (u) issues relating to cyber-security; and (v) outbreaks of infectious diseases or the occurrence of pandemics. Any of these factors (as well as other factors) could have an adverse effect on the financial condition of any given electric utility, including SMUD’s electric utility, and likely will affect individual utilities in different ways.

SMUD is unable to predict what impact such factors will have on the business operations and financial condition of SMUD’s electric system, but the impact could be significant. SMUD has taken major steps to mitigate the impacts of many of the changes. This Official Statement includes a brief discussion of certain of these factors. This discussion does not purport to be comprehensive or definitive, and these matters are subject to change subsequent to the date hereof. Extensive information on the electric utility industry is available from the legislative and regulatory bodies and other sources in the public domain, and potential purchasers of the [2023 Bonds] should obtain and review such information.

APPENDIX B

**2022 AND 2021 CONSOLIDATED FINANCIAL STATEMENTS
AND REPORT OF INDEPENDENT ACCOUNTANTS**

APPENDIX C

BOOK-ENTRY SYSTEM

The information in this Appendix regarding DTC has been provided by DTC, and SMUD takes no responsibility for the accuracy or completeness thereof. SMUD cannot and does not give any assurances that DTC, DTC Participants or Indirect Participants will distribute the Beneficial Owners either (a) payments of interest or principal with respect to the 2023C Subordinated Bonds or (b) certificates representing ownership interest in or other confirmation of ownership interest in the 2023C Subordinated Bonds, or that they will so do on a timely basis or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Official Statement.

The Depository Trust Company (“DTC”) New York, NY, will act as securities depository for the 2023C Subordinated Bonds. The 2023C Subordinated Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Bond certificate will be issued for the 2023C Subordinated Bonds in the aggregate principal amount of the 2023C Subordinated Bonds, and will be deposited with DTC.

DTC, the world’s largest depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues and money market instruments from over 100 countries that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has a Standard & Poor’s rating of AA+. The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the 2023C Subordinated Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2023C Subordinated Bonds on DTC’s records. The ownership interest of each actual purchaser of each 2023C Subordinated Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2023C Subordinated Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their beneficial ownership interests in the 2023C

Subordinated Bonds, except in the event that use of the book-entry system for the 2023C Subordinated Bonds is discontinued.

To facilitate subsequent transfers, all 2023C Subordinated Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of the 2023C Subordinated Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2023C Subordinated Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2023C Subordinated Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the 2023C Subordinated Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2023C Subordinated Bonds, such as redemptions, tenders, defaults, and proposed amendments to the bond documents. For example, Beneficial Owners of the 2023C Subordinated Bonds may wish to ascertain that the nominee holding the 2023C Subordinated Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners.

Redemption notices shall be sent to DTC. If less than all of the 2023C Subordinated Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the 2023C Subordinated Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the 2023C Subordinated Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to SMUD as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2023C Subordinated Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium, redemption proceeds and interest payments on the 2023C Subordinated Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from SMUD or the Trustee, on a payment date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participants and not of DTC, its nominee, the Trustee or SMUD, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, redemption proceeds and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Trustee. Disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of the Direct and Indirect Participants.

A Beneficial Owner shall give notice to elect to have its 2023C Subordinated Bonds purchased or tendered, through its Participant, to the Underwriter, and shall effect delivery of such 2023C Subordinated Bonds by causing the Direct Participant to transfer the Participant's interest in the 2023C Subordinated

Bonds, on DTC's records, to the Underwriter. The requirement of physical delivery of 2023C Subordinated Bonds in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the 2023C Subordinated Bonds are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered 2023C Subordinated Bonds to the Underwriter's DTC account.

DTC may discontinue providing its services as depository with respect to the 2023C Subordinated Bonds at any time by giving reasonable notice to SMUD or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, bond certificates are required to be printed and delivered.

SMUD may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, bond certificates for such 2023C Subordinated Bonds will be printed and delivered to DTC.

Neither SMUD or the Trustee will have any responsibility or obligation to Participants, to Indirect Participants or to any Beneficial Owner with respect to (i) the accuracy of any records maintained by DTC, any Participant, or any Indirect Participant; (ii) the payment by DTC or any Participant or Indirect Participant of any amount with respect to the principal of or premium, if any, or interest on the 2023C Subordinated Bonds; (iii) any notice which is permitted or required to be given to Holders under the Resolution; (iv) the selection by DTC, any Participant or any Indirect Participant of any person to receive payment in the event of a partial redemption of 2023C Subordinated Bonds; (v) any consent given or other action taken by DTC as Bondholder; or (vi) any other procedures or obligations of DTC, Participants or Indirect Participants under the book-entry system.

APPENDIX D

SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION

The following is a summary of certain provisions of the Subordinate Resolution. Other provisions of the Subordinate Resolution are described under the caption “SECURITY FOR THE SUBORDINATED BONDS.” This summary is not to be considered a full statement of the terms of the Subordinate Resolution and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in the Subordinate Resolution.

Certain Definitions

“Assumed Interest Payments” means, for any fiscal year or period, interest which would accrue during such fiscal year or period on an amount equal to then unamortized balance of the remaining sum of Assumed Principal Payments and at the interest rate on the date of such calculation on the Parity Subordinated Debt to which such Assumed Principal Payments relate.

“Assumed Interest Rate” for any Parity Bond or Parity Subordinated Debt means, for any fiscal year or period, the interest rate thereon on the date of such calculation.

“Assumed Principal Payments” means for any fiscal year or period the sum of the following amounts falling within such fiscal year or period: each Excluded Principal Payment amortized equally over the years (pro rata in the case of a partial year) in the period commencing on the stated due date for such Excluded Principal Payment and ending on the date 30 years from the date of issuance of the Parity Subordinated Debt to which such Excluded Principal Payment relates.

“Bond Debt Service” means all amounts required to be paid under the Subordinate Resolution from Net Revenues for principal, interest and reserve fund requirements on the Senior Bonds and all Parity Bonds then outstanding, as the same become due and payable.

“Defeasance Securities” shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of SMUD’s funds:

(i) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are unconditionally guaranteed by, the United States of America, including obligations of any of the federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;

(ii) any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (a) which are not callable prior to maturity or as to which irrevocable instructions have been given to the trustee of such bonds or other obligations by the obligor to give due notice of redemption and to call such bonds for redemption on the date or dates specified in such instructions, (b) which are secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or bonds or other obligations of the character described in the clause (i) above which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate, and (c) as to which the principal of and interest on the bonds and obligations of the character described in the clause (i) above which have been deposited in such fund along with any

cash on deposit in such fund are sufficient to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this clause (ii) on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate;

(iii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by any agency or corporation which has been or may thereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America; and

(iv) with respect to the defeasance of any particular series of Bonds, any other securities specified in the Supplemental Resolution providing for their issuance.

“Electric System” and “Enterprise” means the entire electric system of SMUD, together with all additions, betterments, extensions and improvements to said system or any part thereof. The entire electric system of SMUD shall be deemed to be and to constitute a single unified and integrated system for the furnishing of electric energy to consumers of SMUD and a single enterprise. The terms “Electric System” and “Enterprise” shall have the same meaning and may be used interchangeably.

“Energy Payments” means, when used with respect to the Electric System, all actual costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable for purchased power (including power purchased from any special district included within the boundaries of SMUD), electric and thermal energy and capacity and under contracts providing for payments by SMUD for electric or thermal energy or capacity whether or not such energy or capacity is delivered or capable of being delivered or otherwise made available to or received by or for the account of SMUD.

“Excluded Principal Payments” shall mean each payment of principal of Parity Subordinated Debt which the Board of Directors of SMUD determines (on a date not later than the date of issuance of such Parity Subordinated Debt) that SMUD intends to pay with moneys which are not Revenues. No such determination shall affect the security for such Parity Subordinated Debt or the obligation of SMUD to pay such payments from Revenues.

“Financial Products Agreement” means an interest rate swap, cap, collar, option, floor, forward or other hedging agreement, arrangement or security, however denominated, entered into by SMUD with a Qualified Provider not for investment purposes but with respect to specific Parity Bonds, Subordinated Bonds or Parity Subordinated Debt for the purpose of (1) reducing or otherwise managing SMUD’s risk of interest rate changes or (2) effectively converting SMUD’s interest rate exposure, in whole or in part, from a fixed rate exposure to a variable rate exposure, or from a variable rate exposure to a fixed rate exposure.

“Financial Product Payments” means payments periodically required to be paid to a counterparty by SMUD pursuant to a Financial Products Agreement. For the purpose of complying with any coverage test under the Subordinate Resolution, SMUD (or its consultant) may assume, with respect to any prospective Financial Product Payments that may adjust or vary pursuant to the terms of the related Financial Products Agreement, that the index or benchmark upon which the prospective Financial Product Payments are based shall be fixed for the prospective calculation period at the lesser of (a) the index or benchmark in effect as of the date of calculation, or (b) average rate of such index or benchmark over the most recent twelve calendar months preceding the date of calculation. If a twelve-month average index or benchmark as described in clause (b) is not calculable due to insufficient historic data or other reasons, SMUD (or its consultant) shall use the index or benchmark in effect as of the date of calculation.

“Financial Product Receipts” means amounts periodically required to be paid to SMUD by a counterparty pursuant to a Financial Products Agreement. For the purpose of complying with any coverage test under the Subordinate Resolution, SMUD (or its consultant) may assume, with respect to any prospective Financial Product Receipts that may adjust or vary pursuant to the terms of the related Financial Products Agreement, that the index or benchmark upon which the prospective Financial Product Receipts are based shall be fixed for the prospective calculation period at the lesser of (a) the index or benchmark in effect as of the date of calculation, or (b) average rate of such index or benchmark over the most recent twelve calendar months preceding the date of calculation. If a twelve-month average index or benchmark as described in clause (b) is not calculable due to insufficient historic data or other reasons, SMUD (or its consultant) shall use the index or benchmark in effect as of the date of calculation.

“Maintenance and Operation Costs” means, when used with respect to the Electric System, all actual maintenance and operation costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable, but only if said charges are made in conformity with generally accepted accounting principles, and exclusive in all cases of depreciation or obsolescence charges or reserves therefor, amortization of intangibles or other bookkeeping entries of a similar nature, and also exclusive of all interest charges and charges for the payment of principal, or amortization, of bonded or other indebtedness of SMUD.

Such maintenance and operation costs of the Electric System include, generally, purchased power (including power purchased from any special district included within the boundaries of SMUD), and such part of the cost of fuel of any type or character (including nuclear fuel), taxes, salaries and wages, fees for services, materials and supplies, rents, office supplies and all other costs as are charged directly or apportioned to the operation and maintenance of the generation, transmission and distribution system, customer accounts, sales and administrative functions, or to the general operation of SMUD. Said term does not include costs, or charges made therefor, for capital additions, replacements, betterments, extensions or improvements to or retirements from the Electric System, which under generally accepted accounting principles are properly chargeable to the capital account or the reserve for depreciation, and does not include losses from the sale, abandonment, reclassification, revaluation or other disposition of any properties of SMUD nor such property items, including taxes and fuel, which are capitalized pursuant to then existing accounting practice of SMUD.

“Net Revenues” for any fiscal period means the sum of (a) the Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by SMUD from the Rate Stabilization Fund for treatment as Revenues for such fiscal period, less the sum of (c) all Maintenance and Operation Costs for such fiscal period, (d) all Energy Payments for such fiscal period not included in Maintenance and Operation Costs for such fiscal period, and (e) the amounts, if any, withdrawn by SMUD from Revenues for such fiscal period for deposit in the Rate Stabilization Fund pursuant to the Subordinate Resolution.

“Net Subordinated Revenues” means Net Revenues less Bond Debt Service.

“Parity Bonds” includes the Senior Bonds and all revenue bonds issued on a parity with the Senior Bonds as provided or permitted in the Senior Bond Resolution. No Parity Bonds (other than the Senior Bonds) are currently outstanding.

“Parity Subordinated Debt” means the Subordinated Bonds and all revenue bonds of SMUD having an equal lien and charge upon Net Subordinated Revenues and therefore payable on a parity with the Subordinated Bonds and junior to the Parity Bonds.

“Qualified Provider” means any counterparty to a Financial Products Agreement if the unsecured long-term debt obligations of such counterparty (or of the parent or a subsidiary of such counterparty if such parent or subsidiary unconditionally guarantees the performance of such counterparty under such Financial Products Agreement and the Trustee receives an opinion of counsel to the effect that such guarantee is a valid and binding agreement of such parent or subsidiary), or obligations secured or supported by a letter of credit, contract, guarantee, agreement, insurance policy or surety bond issued by such counterparty (or such guarantor parent or subsidiary), are rated in one of the three highest rating categories of a national rating agency (without regard to any gradation or such rating category) at the time of the execution and delivery of the Financial Products Agreement.

“Revenues” means all charges received for, and all other income and receipts derived by SMUD from, the operation of the Electric System, or arising from the Electric System, including income derived from the sale or use of electric energy generated, transmitted or distributed by any facilities of the Electric System, together with any receipts derived from the sale of any property pertaining to the Electric System or incidental to the operation of the Electric System or from any services performed by SMUD in connection with or incidental to the Electric System, or from any other source whatsoever directly or indirectly derived from the Electric System, but exclusive in every case of any moneys derived from the levy or collection of taxes upon any taxable property in SMUD.

The term “Revenues” also includes any income or revenues derived from the wholesale sale of water developed by the White Rock Project (as defined in Resolution No. 4775), or the Upper American River Project (as defined in Resolution No. 4938), but does not include revenues or income derived from the retail distribution of water through any distribution facility thereafter acquired by SMUD.

The term “Revenues” also includes all interest, profits or other income derived from the investment of any moneys in any fund or account established under the Subordinate Resolution or the Senior Bond Resolution.

Additional Covenants

The Subordinate Resolution contains the following additional covenants, among others:

- (a) That the Electric System will be maintained in good repair, working order and condition at all times, and will be continuously operated in an efficient and economical manner.
- (b) That SMUD will comply with all lawful orders of any governmental agency or authority having jurisdiction in the premises (except while the validity or application thereof is being contested in good faith).
- (c) That proper records and accounts will be maintained of all transactions relating to the Electric System and the Revenues (open to inspection by the Trustee and the Holders of not less than 10 percent in principal amount of the Subordinated Bonds), to be audited annually by an independent certified public accountant within 90 days after close of the fiscal year, and copies of such financial statements supplied to Bondholders on request.

Tax Covenants

SMUD agrees in the Subordinate Resolution not to take any action which would result in interest on the 2023C Subordinated Bonds not being excluded from gross income for federal income tax purposes. SMUD also agrees to establish a separate Rebate Fund for the 2023C Subordinated Bonds and to deposit therein such amounts as are necessary to make the required rebate payments to the United

States Government under the Internal Revenue Code of 1986. Such deposits will be made from any Revenues legally available to SMUD after payment of maintenance and operation costs and Energy Payments, principal of and interest on the Parity Bonds, principal of and interest on the Subordinated Bonds, and any other obligations secured by the Revenues. Amounts in the Rebate Fund, and any earnings thereon, shall be paid to the United States Government as provided in the Tax Certificate.

Amendment of the Subordinate Resolution

The Subordinate Resolution and the rights and obligations of SMUD and of the Holders of the Subordinated Bonds may be modified or amended at any time pursuant to the affirmative vote at a meeting of Bondholders, or with the written consent without a meeting, of the Holders of 60% in aggregate principal amount of the Subordinated Bonds then outstanding, provided that no such modification or amendment shall (i) extend the fixed maturity of any Subordinated Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon or reduce any premium payable upon the redemption thereof, without the consent of the Holder of each Subordinated Bond so affected, or (ii) reduce the aforesaid percentage of Subordinated Bonds required for consent to an amendment or modification, without the consent of the Holders of all the Subordinated Bonds then outstanding. Modifications or amendments may be made, without the consent of any Bondholders, to add covenants of SMUD or to surrender rights reserved by SMUD in the Subordinate Resolution, to cure ambiguities or defective or inconsistent provisions or in regard to questions arising under the Subordinate Resolution without adversely affecting the interests of the Bondholders, or to provide for the issuance of a Series of Subordinated Bonds, subject to the provisions contained in the Subordinate Resolution with respect thereto.

Events of Default and Remedies of Bondholders

Events of Default. The Subordinate Resolution declares each of the following to be an event of default:

- (a) Failure to pay the principal of and premium on any Subordinated Bond when due and payable;
- (b) failure to pay any installment of interest on any Subordinated Bond when due and payable, if such default continues for a period of 30 days;
- (c) if the principal of any Parity Bonds shall be declared to be due and payable on account of the occurrence of a default under or breach of the terms thereof or the Senior Bond Resolution or a similar instrument; and
- (d) if, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of SMUD or of the whole or any substantial part of its property, and such custody or control shall not be terminated or stayed within 60 days.

then and in each and every case during the continuance of such event of default, the Trustee or the Holders of not less than a majority in aggregate principal amount of the Subordinated Bonds at the time outstanding shall be entitled, upon notice in writing to SMUD, to declare the principal of all of the Subordinated Bonds then outstanding, and the interest accrued thereon, to be due and payable immediately, and upon any such declaration the same shall become and shall be immediately due and payable, anything in the Subordinate Resolution or in the Subordinated Bonds contained to the contrary notwithstanding.

Trustee to Represent Subordinated Bondholders. The Trustee is appointed as trustee to represent the Subordinated Bondholders in the matter of exercising and prosecuting on their behalf such rights and remedies as may be available to such Holders under the provisions of the Subordinated Bonds and the Subordinate Resolution, as well as under the Act or other provisions of applicable law. Upon any default or other occasion giving rise to a right of the Trustee to represent the Subordinated Bondholders, the Trustee may take such action as may seem appropriate to it, and, upon the request in writing of the Holders of twenty-five percent (25%) in aggregate principal amount of the Subordinated Bonds then outstanding, which request shall specify such default or occasion and the action to be taken by the Trustee, and upon being furnished with indemnity satisfactory to it, the Trustee shall take such action on behalf of the Bondholders as may have been requested.

Remedies. In case one or more of the events of default shall happen, then and in every such case the Holder of any Subordinated Bond at the time outstanding shall be entitled to proceed to protect and enforce the rights vested in such Holder by the Subordinate Resolution by such appropriate judicial proceeding as such Holder shall deem most effectual to protect and enforce any such right, either by suit in equity or by action at law, whether for the specific performance of any covenant or agreement contained in the Subordinate Resolution, or in aid of the exercise of any powers granted in the Subordinate Resolution, or to enforce any other legal or equitable right vested in the Holders of Subordinated Bonds by the Subordinate Resolution or by law

Distribution of Assets. Upon any distribution of assets of SMUD upon any dissolution, winding up, liquidation or reorganization of SMUD, whether in bankruptcy, insolvency, reorganization or receivership proceedings or upon an assignment for the benefit of creditors or any other marshalling of the assets and liabilities of SMUD or upon any acceleration of maturity of the Subordinated Bonds by declaration or otherwise,

(a) the holders of all Parity Bonds shall first be entitled to receive payment in full of the principal thereof (and premium, if any) and interest due thereon, or provision shall be made for such payment in cash, before the Holders of the Subordinated Bonds are entitled to receive any payment on account of the principal of (or premium, if any) or interest on the indebtedness evidenced by the Subordinated Bonds;

(b) any payment by, or distribution of assets of, SMUD of any kind or character, whether in cash, property or securities, to which the Holders of the Subordinated Bonds or the Trustee would be entitled except for the provisions of the Subordinate Resolution shall be paid or delivered by the person making such payment or distribution, whether a trustee in bankruptcy, a receiver or liquidating trustee or otherwise, directly to the holders of Parity Bonds or their representative or representatives or to the trustee or trustees under the Senior Bond Resolution or any similar instrument under which any instruments evidencing any of such Parity Bonds may have been issued, ratably according to the aggregate amounts remaining unpaid on account of the Parity Bonds held or represented by each, to the extent necessary to make payment in full of all Parity Bonds remaining unpaid after giving effect to any concurrent payment or distribution (or provision therefor) to the holders of such Parity Bonds; and

(c) in the event that, notwithstanding the foregoing, any payment by, or distribution of assets of, SMUD of any kind or character, whether in cash, property or securities shall be received by the Trustee or the Holders of the Subordinated Bonds before all Parity Bonds are paid in full, such payment or distribution shall be held in Trust for the benefit of, and shall be paid over to the holders of such Parity Bonds or their representative or representatives or to the trustee or trustees under the Subordinate Resolution or any similar instrument under which any instruments evidencing any of such Parity Bonds may have been issued, ratably as aforesaid, for application to the payment of all Parity Bonds remaining

unpaid until all such Parity Bonds shall have been paid in full, after giving effect to any concurrent payment or distribution (or provision therefor) to the holders of such Parity Bonds.

Discharge of Subordinate Resolution

The Subordinate Resolution may be discharged by depositing with the Trustee in trust, moneys or Defeasance Securities, in such amount as the Trustee shall determine will, together with the interest to accrue thereon, be fully sufficient to pay and discharge the indebtedness on all Subordinated Bonds at or before their respective maturity dates.

APPENDIX E

SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION

The following is a summary of certain provisions of the Senior Bond Resolution. This summary is not to be considered a full statement of the terms of the Senior Bond Resolution and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in the Senior Bond Resolution.

Between July 1997 and August 2003, SMUD received consents to amend the Senior Bond Resolution from the owners of the requisite percentage of Outstanding Senior Bonds. Pursuant to the authority granted by such consents, SMUD amended the Senior Bond Resolution in October 2003 by adopting the Forty-Eighth Supplemental Resolution and the Forty-Ninth Supplemental Resolution. The following summary of the Senior Bond Resolution reflects such amendments.

Certain Definitions

“Energy Payments” means, when used with respect to the Electric System, all actual costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable for purchased power (including power purchased from any special district included within the boundaries of SMUD), electric and thermal energy and capacity under contracts providing for payments by SMUD for electric or thermal energy or capacity whether or not such energy or capacity is delivered or capable of being delivered or otherwise made available to or received by or for the account of SMUD.

“Net Revenues” for any fiscal period means the sum of (a) the Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by SMUD from the Rate Stabilization Fund for treatment as Revenues for such fiscal period, less the sum of (c) all Maintenance and Operation Costs for such fiscal period, (d) all Energy Payments for such fiscal period not included in Maintenance and Operation Costs for such fiscal period, and (e) the amounts, if any, withdrawn by SMUD from Revenues for such fiscal period for deposit in the Rate Stabilization Fund pursuant to the Senior Bond Resolution.

“Parity Bonds” includes the Senior Bonds and all revenue bonds issued on a parity with the Senior Bonds as provided or permitted in the Senior Bond Resolution. No Parity Bonds (other than the Senior Bonds) are currently outstanding.

“Revenues” means all charges received for, and all other income and receipts derived by SMUD from, the operation of the Electric System, or arising from the Electric System, including income derived from the sale or use of electric energy generated, transmitted or distributed by any facilities of the Electric System, together with any receipts derived from the sale of any property pertaining to the Electric System or incidental to the operation of the Electric System or from any services performed by SMUD in connection with or incidental to the Electric System, or from any other source whatsoever directly or indirectly derived from the Electric System, but exclusive in every case of any moneys derived from the levy or collection of taxes upon any taxable property in SMUD.

The term “Revenues” also includes any income or revenues derived from the wholesale sale of water developed by the White Rock Project (as defined in Resolution No. 4775), or the Upper American River Project (as defined in Resolution No. 4938), but does not include revenues or income derived from the retail distribution of water through any distribution facility thereafter acquired by SMUD. The term “Revenues” also includes all interest, profits or other income derived from the investment of any moneys in any fund or account established under the Senior Bond Resolution.

Allocation of Revenues

After making an allocation of Revenues to Maintenance and Operation Costs and to Energy Payments not included in Maintenance and Operation Costs, the Treasurer of SMUD is required (subject to the last paragraph of this section) to set aside, on an equal priority with sums set aside for all other Parity Bonds, Net Revenues as follows:

First: To the Electric Revenue Bond Interest Fund, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-fifth (1/5) of the aggregate amount of interest becoming due on the Senior Bonds on the next succeeding semiannual interest payment date, until an amount sufficient to meet said interest payment is accumulated.

Second: To the Electric Revenue Bond Redemption Fund, to be set aside in the Principal Account and Sinking Fund, respectively, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-tenth (1/10) of the aggregate amount of principal becoming due on serial Senior Bonds and the aggregate minimum sinking fund payments required to be made with respect to term Senior Bonds during the next ensuing 12 months, until an amount sufficient to meet the principal and sinking fund requirements on all Senior Bonds outstanding is accumulated in said accounts, respectively.

Third: To the Electric Revenue Bond Reserve Fund, such amounts as any supplemental resolution authorizing the issuance of a series of Senior Bonds may require to build up and maintain said fund.

If interest on Senior Bonds of a series or maturity is payable more frequently than semiannually, the Treasurer of SMUD shall set aside out of Net Revenues in the Interest Fund such amounts as may be required to pay interest on the Senior Bonds of such series or maturity on each interest payment date at least one month prior to such interest payment date. Allocation to the Electric Revenue Bond Redemption Fund and Electric Revenue Bond Reserve Fund shall be made as set forth above.

All remaining Revenues, after making the foregoing allocations, will be available to SMUD for all lawful SMUD purposes. Such remaining Revenues will be used for the purpose of, among other things, making any required deposits to the Rebate Fund. See "Tax Covenants."

Reserve Fund

The Electric Revenue Bond Reserve Fund is a parity reserve fund for the equal benefit of all Parity Bonds outstanding. Moneys in such fund (except any excess over the required balance which may be withdrawn and used for any SMUD use) shall be used solely for the purpose of making good any deficiency in any fund established for the payment of interest, principal or sinking fund payments pursuant to the Senior Bond Resolution or any resolution authorizing the issuance of any Parity Bonds.

The Electric Revenue Bond Reserve Fund is required to be maintained in an amount such that the amount in the combined reserve funds of all Parity Bonds then outstanding will at no time be less than the current annual interest requirements on all then outstanding Parity Bonds (except bonds for which payment has been provided in advance). If SMUD's debt service ratio in any fiscal year (the ratio of Net

Revenues during said fiscal year to maximum annual debt service during the period of three fiscal years next following said fiscal year on all Parity Bonds then outstanding) shall fall below 1.40, there shall be set aside in the reserve funds from the first available Net Revenues not less than 15 percent of the total current monthly interest requirements of all Parity Bonds until the debt service ratio again exceeds 1.40, or until the aggregate amount on deposit in the reserve funds is equal to the maximum annual debt service on all Parity Bonds, whichever occurs first. The combined reserve funds cannot be required to exceed the maximum annual debt service on all outstanding Parity Bonds.

Rates and Charges

SMUD has covenanted in the Senior Bond Resolution to establish and at all times maintain and collect rates and charges for the sale or use of electric energy generated, transmitted, distributed or furnished by SMUD which, together with certain items of other income permitted under the Senior Bond Resolution, will yield Revenues at least sufficient, with respect to the ensuing 12 months, to pay and provide for all sums required for Maintenance and Operation Costs and Energy Payments not included in Maintenance and Operation Costs and, in addition, to provide an aggregate sum equal to at least 1.20 times the total amount required for the payment of principal and interest, together with any sinking fund or reserve fund payments, on all Parity Bonds, in each case during such 12 months.

SMUD has full power to establish rates and charges for all SMUD services, and the levels of such rates are not subject to review or regulation by any other governmental agency, either federal or state.

Limitations on Additional Obligations Payable from Revenues

The Senior Bond Resolution provides that SMUD will not, so long as any Senior Bonds are outstanding, issue any obligations payable in whole or in part from Revenues except the following:

- (a) Senior Bonds of any series authorized pursuant to the Senior Bond Resolution;
- (b) Refunding bonds issued solely to refund all or part of the Parity Bonds;
- (c) General obligation bonds or other securities secured by the full faith and credit of SMUD;
- (d) Additional revenue bonds (including additional Parity Bonds), payable on a parity with the Senior Bonds, with an equal lien and charge upon the Revenues, but only subject to the following conditions:
 - (1) Such additional revenue bonds shall have been authorized;
 - (2) The proceedings for the issuance of such additional revenue bonds shall require SMUD to fix and collect rates and charges in an amount not less, with respect to such bonds, than the amounts required with respect to Senior Bonds issued under the Senior Bond Resolution;
 - (3) SMUD shall not then be in default under the Senior Bond Resolution or other resolutions authorizing the issuance of Parity Bonds; and

(4) A certificate of SMUD, certifying--

(1) that the Net Revenues, after the completion of the additions, betterments, extensions or improvements proposed to be financed from the proceeds of such additional revenue bonds, will be sufficient to pay the principal of and interest (and bond reserve fund requirements, if any) on all Parity Bonds then outstanding and on such additional revenue bonds then proposed to be issued, and

(2) that the Net Revenues, for a period of twelve consecutive months during the twenty-four months immediately preceding the date upon which such additional revenue bonds will become outstanding, have been at least equal to 1.25 times the sum of

- (i) the annual interest,
- (ii) the principal amount of serial bonds falling due, and
- (iii) the amount of minimum sinking fund payments required for the payment of term bonds,

as computed for the year in which such sum shall then be a maximum, including both then outstanding Parity Bonds and the additional revenue bonds then proposed to be issued, provided that--

(A) if rates and charges in effect on the date upon which such additional revenue bonds will become outstanding will be greater than those in effect during the entire twelve months elected for the foregoing computation, then the Net Revenues for said period of twelve months may be augmented by 75% of the estimated increase in Net Revenues computed to accrue to the Electric System in the first twelve months during which such rates and charges shall be in effect; and

(B) if such additional revenue bonds or any thereof shall be issued for the purpose of acquiring an existing revenue-producing electric system, 75% of the estimated pro forma net revenues of such existing system (calculated on the basis of assumed SMUD ownership and operation during such period but otherwise on the basis of actual gross revenues of such existing system at the rates actually charged therefor) for the preceding twelve months may be added to the actual Net Revenues of the Electric System for the twelve months elected for said computation and treated as if actually received by the Electric System during those twelve months; and

(e) Revenue bonds junior and subordinate to the Parity Bonds.

Additional Covenants

The Senior Bond Resolution contains the following additional covenants, among others:

(a) SMUD will cause the Electric System to be maintained in good repair, working order and condition at all times, and will continuously operate the Electric System in an efficient and economical manner, and so that all lawful orders of any governmental agency or authority having jurisdiction in the premises shall be complied with, but SMUD shall not be required to comply with any such orders so long as the validity or application thereof shall be contested in good faith.

SMUD further covenants and agrees that it will at all times, while any of the Bonds are outstanding maintain and comply with all necessary permits and licenses issued by the Atomic Energy Commission.

(b) None of the electric energy owned, controlled or supplied by SMUD shall be furnished or supplied free, but on the contrary shall always be sold or furnished so as to produce Revenues.

If SMUD shall sell water developed or made available by the Electric System, a reasonable charge therefor shall be made and the revenue received by SMUD therefrom shall be Revenues and accounted for as such, except that SMUD may furnish water developed or impounded by the Electric System for any purpose (other than the use of such water for hydroelectric purposes) without charge as SMUD in its discretion deems advisable if such water is so furnished without any distribution cost to SMUD. SMUD may sell any water for consumption for domestic or other purposes (exclusive of the use thereof for hydroelectric purposes), but SMUD shall charge itself a reasonable wholesale rate for any water sold by SMUD. SMUD also may sell water at wholesale to any other person, for distribution by such other person for domestic or other purposes (except use for hydroelectric purposes), and SMUD shall likewise charge a reasonable wholesale rate to any such other person. In each case, all such wholesale rates shall be included in Revenues. The revenue received by SMUD from any retail sale of water distributed by SMUD shall not be deemed Revenues, but shall be available to SMUD for any SMUD purpose.

(c) That all taxes and governmental charges and other lawful claims which might become a lien on the Electric System or the Revenues or impair the security of the Senior Bonds will be paid and discharged when due.

(d) SMUD will not sell or otherwise dispose of any property essential to the proper operation of the Electric System or to the maintenance of the Revenues. SMUD will not enter into any lease or agreement which impairs or impedes the operation of the Electric System or which otherwise impairs or impedes the rights of the Bondholders with respect to Revenues. Nothing contained in the Senior Bond Resolution shall prevent SMUD from entering into sale and leaseback agreements pursuant to which SMUD may acquire the use of property subject to the terms of such sale and leaseback agreements.

(e) That insurance adequate in amounts and as to risks covered will be maintained against such risks as are usually insurable in connection with similar electric systems, and in addition public liability and property damage insurance in amounts not less than \$1,000,000 per accident and adequate fidelity bonds on all officers and employees of SMUD handling or responsible for SMUD funds, subject in each case to the condition that such insurance is obtainable at reasonable rates and upon reasonable terms and conditions. See "Insurance" for a description of SMUD's insurance.

(f) That the net proceeds realized by SMUD in the event all or any part of the Electric System is taken by eminent domain proceedings will be applied to the redemption or retirement of all Parity Bonds if sufficient therefor, and, if not, then pro rata to the redemption or retirement of Parity Bonds or to new facilities if the additional Revenues to be derived therefrom will sufficiently offset the loss of Revenues resulting from such eminent domain so that the ability of SMUD to meet its obligations will not be substantially impaired.

(g) That SMUD will at all times use its best efforts to maintain the powers, functions and duties now reposed in it pursuant to law.

(h) That SMUD will establish and at all times maintain and collect rates and charges for the sale or use of its electric energy sufficient to permit SMUD to purchase power or issue and sell Parity Bonds to finance additions, betterments, extensions and improvements to the Electric System as may be reasonably necessary to satisfy its then projected electric demand upon its Electric System, and that unless the Board determines that SMUD will be able to satisfy such demand through the purchase of electric energy, SMUD will proceed with all reasonable diligence to issue and sell such Parity Bonds.

Tax Covenants

SMUD agrees in the Senior Bond Resolution not to take any action which would result in interest on the Senior Bonds not being excluded from gross income for federal income tax purposes. SMUD also agrees to establish a separate Rebate Fund for the Senior Bonds and to deposit therein such amounts as are necessary to make the required rebate payments to the United States Government under the Internal Revenue Code of 1986. Such deposits will be made from any Revenues legally available to SMUD after payment of maintenance and operation costs and Energy Payments, principal of and interest on the Parity Bonds and any other obligations secured by the Revenues. Amounts in the Rebate Fund, and any earnings thereon, shall be paid to the United States Government as provided in the Tax Certificate.

Amendment of the Senior Bond Resolution

The Senior Bond Resolution and the rights and obligations of SMUD and of the Holders of the Senior Bonds may be modified or amended at any time pursuant to the affirmative vote at a meeting of Bondholders, or with the written consent without a meeting, of the Holders of 60 percent in aggregate principal amount of the Senior Bonds then outstanding, provided that no such modification or amendment shall (i) extend the fixed maturity of any Senior Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon or reduce any premium payable upon the redemption thereof, without the consent of the Holder of each Senior Bond so affected, or (ii) reduce the aforesaid percentage of Senior Bonds required for consent to an amendment or modification, without the consent of the Holders of all the Senior Bonds then outstanding. Modifications or amendments may be made, without the consent of any Bondholders, to add covenants of SMUD or to surrender rights reserved by SMUD in the Senior Bond Resolution, to cure ambiguities or defective or inconsistent provisions or in regard to questions arising under the Senior Bond Resolution without adversely affecting the interests of the Bondholders, or to provide for the issuance of a Series of Senior Bonds, subject to the provisions contained in the Senior Bond Resolution with respect thereto.

Events of Default and Remedies of Bondholders

The Senior Bond Resolution declares each of the following to be an event of default:

- (a) Failure to pay the principal of and premium on any Senior Bond when due and payable;
- (b) Failure to pay any installment of interest on any Senior Bond when due and payable, if such default continues for a period of 30 days;
- (c) Default by SMUD in the observance of any of the covenants, agreements or conditions on its part in the Senior Bond Resolution or in the Senior Bonds, if such default continues for a period of 60 days after written notice thereof (specifying such default and requiring the same to be remedied) has been given to SMUD by the Trustee, or to SMUD and the Trustee by the Holders of not less than 25 percent in aggregate principal amount of the Senior Bonds at the time outstanding; and
- (d) If, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of SMUD or of the whole or any substantial part of its property, and such custody or control shall not be terminated or stayed within 60 days.

In the event of default, the Trustee or the Holders of not less than a majority in aggregate principal amount of the outstanding Senior Bonds may, upon written notice to SMUD, declare the principal of all outstanding Senior Bonds, and the interest accrued thereon, to be due and payable immediately. The Trustee is appointed as trustee to represent Bondholders and may take such action as

may seem appropriate to it, and, upon the written request of the Holders of 25 percent in aggregate principal amount of the outstanding Senior Bonds, and upon being furnished with indemnity satisfactory to it, will take such action on behalf of Bondholders as is specified in such written request. Each Bondholder is entitled to proceed to protect and enforce the rights vested in such Holder by the Senior Bond Resolution by such appropriate judicial proceedings as such Holder deems most effectual.

The rights of Bondholders are limited and restricted to the use and application of Revenues as provided in the Senior Bond Resolution and do not extend to the levy of any attachment or execution upon or forfeiture of any of the properties of SMUD or to any moneys derived by SMUD from the levy or collection of taxes.

In addition to the limitations on remedies contained in the Senior Bond Resolution, the rights and remedies provided by the Senior Bonds and the Senior Bond Resolution, as well as the enforcement by SMUD of contracts with customers of the Electric System, may be limited by and are subject to bankruptcy, insolvency, reorganization and other laws affecting the enforcement of creditors' rights.

Discharge of Senior Bond Resolution

The Senior Bond Resolution may be discharged by depositing with the Trustee in trust, moneys or Federal Securities or general obligation bonds of the State of California, in such amount as the Trustee shall determine will, together with the interest to accrue thereon, be fully sufficient to pay and discharge the indebtedness on all Senior Bonds at or before their respective maturity dates.

APPENDIX F

PROPOSED FORM OF LEGAL OPINION FOR 2023C SUBORDINATED BONDS

[subject to internal review]
[Closing Date]

Sacramento Municipal Utility District
Sacramento, California

Sacramento Municipal Utility District
Subordinated Electric Revenue Refunding Bonds, 2023 Series C
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the Sacramento Municipal Utility District (“SMUD”) in connection with the issuance of \$_____ aggregate principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “2023C Subordinated Bonds”), issued pursuant to Resolution No. 85-11-1 of the Board of Directors of SMUD, adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted June 21, 2001 (the “Subordinate Master Resolution”), as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. 22-05-[], adopted May 19, 2023 (the “Fourteenth Supplemental Resolution”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution.

In such connection, we have reviewed the Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after original delivery of the 2023C Subordinated Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after original delivery of the 2023C Subordinated Bonds on the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. Our engagement with respect to the 2023C Subordinated Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Resolution and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the 2023C Subordinated Bonds to be included in gross income for federal income tax purposes.

We call attention to the fact that the rights and obligations under the 2023C Subordinated Bonds, the Resolution and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against governmental entities such as SMUD. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement, dated _____, 2023, or other offering material relating to the 2023C Subordinated Bonds and express no opinion or view with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The 2023C Subordinated Bonds constitute the valid and binding limited obligations of SMUD.

2. The Resolution, including the Fourteenth Supplemental Resolution, has been duly adopted by, and constitutes the valid and binding obligation of, SMUD. The Resolution creates a valid pledge, to secure the payment of the principal of and interest on the 2023C Subordinated Bonds, of the Net Subordinated Revenues, subject to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution.

3. Interest on the 2023C Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Interest on the 2023C Subordinated Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. We observe that, for tax years beginning after December 31, 2022, interest on the 2023C Subordinated Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2023C Subordinated Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP

per

APPENDIX G

FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the “Disclosure Agreement”) is executed and delivered by the Sacramento Municipal Utility District (the “Issuer”) and U.S. Bank Trust Company, National Association in its capacity as Dissemination Agent (the “Dissemination Agent”) in connection with the issuance of \$_____ aggregate principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “2023C Subordinated Bonds”). The 2023C Subordinated Bonds are being issued pursuant to the Issuer’s Resolution No. 85-11-1, adopted on November 7, 1985, as amended and restated by Resolution No. 01-06-10 (the “Subordinate Master Resolution”), as supplemented by supplemental resolutions, including Resolution No. 23-05-[], adopted on May 18, 2023 (the “Fourteenth Supplemental Resolution”). The Subordinate Master Resolution and all supplemental resolutions, including the Fourteenth Supplemental Resolution, are collectively referred to herein as the “Subordinate Resolution.” Pursuant to Section 86.11 of the Subordinate Resolution, the Issuer and the Dissemination Agent covenant and agree as follows:

SECTION 1. Purpose of the Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Issuer and the Dissemination Agent for the benefit of the Holders and Beneficial Owners of the 2023C Subordinated Bonds and in order to assist the Participating Underwriter in complying with S.E.C. Rule 15c2-12(b)(5).

SECTION 2. Definitions. In addition to the definitions set forth in the Subordinate Resolution, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

“Annual Report” shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

“Beneficial Owner” shall mean any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2023C Subordinated Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

“Disclosure Representative” shall mean the Treasurer of the Issuer or his or her designee, or such other officer or employee as the Issuer shall designate in writing to the Trustee from time to time.

“Dissemination Agent” shall mean U.S. Bank Trust Company, National Association, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the Issuer and which has filed with the Trustee a written acceptance of such designation.

“EMMA” shall mean the MSRB’s Electronic Municipal Market Access system.

“Financial Obligation” shall mean, for purposes of the Listed Events set out in Section 5(a)(15) and Section 5(a)(16), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.

“MSRB” shall mean the Municipal Securities Rulemaking Board.

“Participating Underwriter” shall mean any of the original underwriters of the 2023C Subordinated Bonds required to comply with the Rule in connection with offering of the 2023C Subordinated Bonds.

“Repository” shall mean the MSRB through EMMA or any other entity or system designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule.

“Rule” shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

“State” shall mean the State of California.

SECTION 3. Provision of Annual Reports.

(a) The Issuer shall, or shall cause the Dissemination Agent to, not later than one hundred eighty (180) days after the end of the Issuer’s fiscal year (presently December 31), commencing with the report for the 2023 Fiscal Year, provide to each Repository an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may include by reference other information as provided in Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date. If the fiscal year changes for the Issuer, the Issuer shall give notice of such change in the same manner as for a Listed Event under Section 5 hereof.

(b) Not later than fifteen (15) Business Days prior to the dates specified in subsection (a) for providing the Annual Report to each Repository, the Issuer shall provide its respective Annual Report to the Dissemination Agent. If by such date, the Dissemination Agent has not received a copy of the Annual Report from the Issuer, the Dissemination Agent shall contact the Issuer to determine if the Issuer is in compliance with the first sentence of this subsection (b).

(c) If the Dissemination Agent is unable to verify that an Annual Report of the Issuer has been provided to each Repository by the date required in subsection (a), the Dissemination Agent shall send a notice to each Repository and the MSRB (if the MSRB is not a Repository) in substantially the form attached as Exhibit A.

(d) The Dissemination Agent shall:

(1) determine each year prior to the date for providing the Annual Report the name and address of each Repository and then-applicable rules and procedures for filing the Annual Report with each Repository, if any; and

(2) file a report with the Issuer certifying that the Annual Report has been provided pursuant to this Disclosure Agreement, stating the date it was provided and listing each Repository to which it was provided.

SECTION 4. Content of Annual Reports.

(a) The Issuer’s Annual Report shall contain or include by reference the following:

(1) The audited financial statements of the Issuer for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board and where not in conflict with the Financial Accounting Standards Board (“FASB”) pronouncements or accounting principles prescribed by FASB. If the Issuer’s audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.

(2) An update of the following types of information contained in Appendix A to the official statement, dated _____, 2023 and related to the 2023C Subordinated Bonds:

(i) The table entitled “Power Supply Resources.”

(ii) The table entitled “Projected Requirements and Resources to Meet Load Requirements.”

(iii) The table entitled “Average Class Rates” (to the extent such table relates to rates and revenues of the Issuer).

(iv) The table entitled “Selected Operating Data.”

(v) The table entitled “Unconsolidated Financial Data.”

(vi) The balance in the Decommissioning Trust Fund, the current estimate of decommissioning costs, the decommissioning costs to date, and the annual contribution level to the Decommissioning Trust Fund, all relating to the Rancho Seco Nuclear Power Plant.

(vii) The table entitled “Estimated Capital Requirements.”

(b) Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Issuer or public entities related thereto, which have been submitted to each Repository or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the MSRB. The Issuer shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Listed Events.

(a) Pursuant to the provisions of this Section 5, the Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the 2023C Subordinated Bonds not later than ten (10) business days after the occurrence of the event:

(1) principal and interest payment delinquencies;

(2) non-payment related defaults, if material;

(3) unscheduled draws on any applicable debt service reserves reflecting financial difficulties;

- (4) unscheduled draws on credit enhancement reflecting financial difficulties;
- (5) substitution of credit or liquidity providers, or their failure to perform;
- (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701 TEB) or other material notices or determinations with respect to the tax status of the 2023C Subordinated Bonds or other material events adversely affecting the tax status of the 2023C Subordinated Bonds;
- (7) modifications to rights of Bondholders, if material;
- (8) bond calls, if material, and tender offers;
- (9) defeasances;
- (10) release, substitution or sale of property securing repayment of the 2023C Subordinated Bonds, if material;
- (11) rating changes;
- (12) bankruptcy, insolvency, receivership or similar event of the Issuer;
- (13) the consummation of a merger, consolidation, or acquisition involving the Issuer or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
- (14) appointment of a successor or additional trustee or the change of name of the Trustee, if material;
- (15) incurrence of a Financial Obligation of the Issuer, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Issuer, any of which affect Bondholders, if material; and
- (16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Issuer, any of which reflect financial difficulties.

(b) For the purpose of the event identified in Section 5(a)(12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Issuer in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Issuer, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Issuer.

(c) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event, the Issuer shall as soon as possible determine if such event is required to be reported pursuant to this Section 5.

(d) If the Issuer has determined that such event is required to be reported pursuant to this Section 5, the Issuer shall promptly notify the Dissemination Agent in writing. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to subsection (e).

(e) If the Dissemination Agent has been instructed by the Issuer to report the occurrence of a Listed Event, the Dissemination Agent shall file a notice of such occurrence with the MSRB (if the MSRB is not a Repository) and each Repository.

SECTION 6. Termination of Reporting Obligation. The obligations of the Issuer and the Dissemination Agent under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the 2023C Subordinated Bonds. If such termination occurs prior to the final maturity of the 2023C Subordinated Bonds, the Issuer shall give notice of such termination in the same manner as for a Listed Event under Section 5.

SECTION 7. Dissemination Agent; Filings.

(a) The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Issuer pursuant to this Disclosure Agreement. If at any time there is not any other designated Dissemination Agent, the Issuer shall be the Dissemination Agent. The initial Dissemination Agent shall be U.S. Bank Trust Company, National Association.

(b) Unless and until one or more different or additional Repositories are designated or authorized by the Securities and Exchange Commission, all filings with a Repository which are required by this Disclosure Agreement shall be filed with the MSRB through EMMA and shall be in an electronic format and accompanied by such identifying information as prescribed by the MSRB in accordance with the Rule.

SECTION 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Issuer and the Dissemination Agent may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, or 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the 2023C Subordinated Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the 2023C Subordinated Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (1) is approved by the Holders of 60% of the 2023C Subordinated Bonds, or (2) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the 2023C Subordinated Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Issuer shall describe such amendment in its next respective Annual Report, and shall include, as applicable, a

narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles from those described in Section 4(a)(1), on the presentation) of financial information or operating data being presented by the Issuer. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (1) notice of such change shall be given in the same manner as for a Listed Event under Section 5, and (2) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

SECTION 9. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 10. Default. In the event of a failure of the Issuer or the Trustee to comply with any provision of this Disclosure Agreement, the Trustee shall, at the request of any Participating Underwriter or the Holders of at least 25% aggregate principal amount of Outstanding Bonds and upon being indemnified to its satisfaction from and against any costs, liability, expenses and fees of the Trustee, including, without limitation fees and expenses of its attorneys, or any Holder or Beneficial Owner of the 2023C Subordinated Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer or the Dissemination Agent, as the case may be, to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Subordinate Resolution, and the sole remedy under this Disclosure Agreement in the event of any failure of the Issuer or the Dissemination Agent to comply with this Disclosure Agreement shall be an action to compel performance.

SECTION 11. Duties, Immunities and Liabilities of Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement, and the Issuer agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys' fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's negligence or willful misconduct. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement and no implied duties for obligation shall be read into this Disclosure Agreement against the Dissemination Agent. The Dissemination Agent has no power to enforce nonperformance on the part of the Issuer. The Dissemination Agent shall be paid compensation by the Issuer for its services provided hereunder in accordance with its schedule of fees provided to the Issuer and all expenses, legal fees and costs of the Dissemination Agent made or incurred by the Dissemination Agent in the performance of its duties hereunder. The obligations of the Issuer under this Section shall survive resignation or removal of the Dissemination Agent and payment of the 2023C Subordinated Bonds.

SECTION 12. Notices. Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:

To the Issuer: Sacramento Municipal Utility District
6201 S Street, MS B405
Sacramento, California 95817
Attention: Treasurer
Telephone: (916) 732-6509
Fax: (916) 732-5835

To the Dissemination Agent: U.S. Bank Trust Company, National Association
Global Corporate Trust
One California Street, Suite 1000
San Francisco, California 94111
Telephone: (415) 677-3699
Fax: (415) 677-3769

To the Trustee: U.S. Bank Trust Company, National Association
Global Corporate Trust
One California Street, Suite 1000
San Francisco, California 94111
Telephone: (415) 677-3699
Fax: (415) 677-3769

The Issuer, the Dissemination Agent and the Trustee may, by giving written notice hereunder to the other person listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent. Unless specifically otherwise required by the context of this Disclosure Agreement, a party may give notice by any form of electronic transmission capable of producing a written record. Each such party shall file with the Trustee and Dissemination Agent information appropriate to receiving such form of electronic transmission.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Issuer, the Dissemination Agent, the Participating Underwriter and Holders and Beneficial Owners from time to time of the 2023C Subordinated Bonds, and shall create no rights in any other person or entity.

SECTION 14. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Dated: _____, 2023.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
Treasurer

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
as Dissemination Agent

By _____
Authorized Officer

ACKNOWLEDGED:

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Trustee

By: _____
Authorized Officer

EXHIBIT A

NOTICE TO REPOSITORIES OF FAILURE TO FILE ANNUAL REPORT

Name of Issuer: Sacramento Municipal Utility District

Name of Bond Issue: Subordinated Electric Revenue Refunding Bonds, 2023 Series C

Name of Borrower: Sacramento Municipal Utility District

Date of Issuance: _____, 2023

NOTICE IS HEREBY GIVEN that the Sacramento Municipal Utility District (the “Issuer”) has not provided an Annual Report with respect to the above-named Bonds as required by Section 80.11 of Resolution No. 23-05-[___], each adopted May 18, 2023, by the Issuer. [The Issuer anticipates that the Annual Report will be filed by _____.]

Dated: _____

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
on behalf of Sacramento Municipal Utility District

cc: Sacramento Municipal Utility District

PRELIMINARY OFFICIAL STATEMENT DATED [], 2023**NEW ISSUE- FULL BOOK-ENTRY**

Ratings: See “RATINGS” herein

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD, based upon an analysis of existing laws, regulations, rulings and court decisions and, assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2023 Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. In the further opinion of Bond Counsel, interest on the 2023 Subordinated Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. Bond Counsel observes that, for tax years beginning after December 31, 2022, interest on the 2023 Subordinated Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2023 Subordinated Bonds. See “TAX MATTERS.”



\$[PAR]* Subordinated Electric Revenue Bonds 2023 Series D	\$[PAR]* Subordinated Electric Revenue Bonds 2023 Series E	\$100,000,000* Subordinated Electric Revenue Refunding Bonds 2023 Series F
-------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------

Dated: Date of Delivery

Due: See “SUMMARY OF THE OFFERING” herein

The Subordinated Electric Revenue Bonds, 2023 Series D (the “2023D Subordinated Bonds”), the Subordinated Electric Revenue Bonds, 2023 Series E (the “2023E Subordinated Bonds”) and the Subordinated Electric Revenue Refunding Bonds, 2023 Series F (the “2023F Subordinated Bonds”) and, together with the 2023D Subordinated Bonds and the 2023E Subordinated Bonds, the “2023 Subordinated Bonds”) will be issued pursuant to Resolution No. 85-11-1 of the Sacramento Municipal Utility District (“SMUD”), adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted June 21, 2001, as supplemented and amended, and will be payable from the Net Subordinated Revenues of the Electric System of SMUD, as described herein. The 2023 Subordinated Bonds are being issued to (i) finance and refinance certain improvements and additions to SMUD’s Electric System, including through the refunding of SMUD’s commercial paper notes, (ii) refund the Subordinated Electric Revenue Bonds, 2019 Series A, and (iii) pay certain costs associated with the issuance of the 2023 Subordinated Bonds. See “PLAN OF FINANCE.”

The 2023 Subordinated Bonds will initially be issued in the Term Rate Mode and will mature on the dates, bear interest initially at the initial Term Rates, for the initial Term Rate Periods ending on the dates and be subject to mandatory purchase on the initial scheduled Mandatory Purchase Dates as described in the “SUMMARY OF THE OFFERING” following this cover page. Each series of the 2023 Subordinated Bonds may, under certain circumstances, be converted to a Daily Mode, Weekly Mode, Flexible Mode, Index Mode, Direct Purchase Index Mode or Fixed Rate Mode, and may be converted from one Term Rate Period to another Term Rate Period. Each series of 2023 Subordinated Bonds is subject to mandatory tender in the event of any such conversion related thereto. See “THE 2023 SUBORDINATED BONDS – Conversion Between Modes” and “– Mandatory Purchase on the Mandatory Purchase Date”. *This Official Statement provides information as of its date concerning the 2023 Subordinated Bonds while bearing interest in the Term Rate Mode in the initial Term Rate Periods. Owners and prospective purchasers of the 2023 Subordinated Bonds should not rely on this Official Statement for information concerning the 2023 Subordinated Bonds in connection with any conversion of the 2023 Subordinated Bonds to an Interest Rate Mode other than the Term Rate Mode or to a new Term Rate Period, but should look solely to the offering document to be used in connection with any such conversion.*

The 2023 Subordinated Bonds are also subject to mandatory tender, and optional and mandatory redemption prior to maturity as set forth herein. See “THE 2023 SUBORDINATED BONDS – Mandatory Purchase on the Mandatory Purchase Date,” “– Optional Redemption” and “– Mandatory Sinking Fund Redemption” herein.

While in the Term Rate Mode, interest on the 2023 Subordinated Bonds shall be payable semiannually on each [February 15] and [August 15], commencing on [August 15, 2023], on any Mandatory Purchase Date therefor and on the maturity date thereof.

The 2023 Subordinated Bonds of each Series in the Term Rate Mode are being issued in denominations of \$5,000 and any integral multiple thereof as fully registered bonds and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository for the 2023

Subordinated Bonds, and individual purchases of the 2023 Subordinated Bonds will be made in book-entry form only. Principal or Redemption Price or Purchase Price of, and interest on the 2023 Subordinated Bonds will be payable by U.S. Bank Trust Company, National Association, as trustee (the “Trustee”) to DTC, which is obligated in turn to remit such principal or Redemption Price or Purchase Price, and interest to its DTC Participants for subsequent disbursement to the beneficial owners of the 2023 Subordinated Bonds, as described herein.

The principal of and interest on the 2023 Subordinated Bonds, together with the debt service on other Subordinated Bonds and Parity Subordinated Debt (as defined herein), are payable exclusively from and secured by a pledge of the Net Subordinated Revenues of the Electric System of SMUD. Neither the credit nor the taxing power of SMUD or the State of California is pledged to the payment of the 2023 Subordinated Bonds. Payment of the principal of and interest on the Subordinated Bonds, including the 2023 Subordinated Bonds, is subordinated to the payment of principal and interest on SMUD’s Electric Revenue Bonds and other Parity Bonds (as defined herein).

The information presented on this cover page is for general reference only and is qualified in its entirety by reference to the entire Official Statement and the documents summarized and described herein.

The 2023 Subordinated Bonds are offered when, as and if issued and received by the Underwriters, subject to the approval of the validity of the 2023 Subordinated Bonds and certain other legal matters by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. Certain legal matters will be passed on for the Underwriters by their counsel, Nixon Peabody LLP, San Francisco, California. It is expected that the 2023 Subordinated Bonds will be available for delivery through the facilities of DTC on or about _____, 2023.

BofA Securities

**(as lead underwriter for the 2023D Subordinated Bonds
and 2023E Subordinated Bonds)**

Barclays

(as lead underwriter for the 2023F Subordinated Bonds)

_____, 2023

* Preliminary, subject to change.

SUMMARY OF THE OFFERING

\$(PAR)* Subordinated Electric Revenue Bonds 2023 Series D

Maturity Date:	[August 15], 20[]*
Initial Interest Rate Mode:	Term Rate Mode
End of Initial Term Rate Period:	[]*
Initial Scheduled Mandatory Purchase Date:	[]*
Call Protection Date for Initial Term Rate Period:	[], 20[]*
Initial Interest Rate:	%
Price:	%
Yield for Initial Term Rate Period:	%
CUSIP†:	

\$(PAR)* Subordinated Electric Revenue Bonds 2023 Series E

Maturity Date:	[August 15], 20[]*
Initial Interest Rate Mode:	Term Rate Mode
End of Initial Term Rate Period:	[]*
Initial Scheduled Mandatory Purchase Date:	[]*
Call Protection Date for Initial Term Rate Period:	[], 20[]*
Initial Interest Rate:	%
Price:	%
Yield for Initial Term Rate Period:	%
CUSIP†:	

\$(PAR)* Subordinated Electric Revenue Refunding Bonds 2023 Series F

Maturity Date:	[August 15], 20[]*
Initial Interest Rate Mode:	Term Rate Mode
End of Initial Term Rate Period:	[]*
Initial Scheduled Mandatory Purchase Date:	[]*
Call Protection Date for Initial Term Rate Period:	[], 20[]*
Initial Interest Rate:	%
Price:	%
Yield for Initial Term Rate Period:	%
CUSIP†:	

* Preliminary, subject to change.

† CUSIP® is a registered trademark of the American Bankers Association. CUSIP® data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP® numbers have been assigned by an independent company not affiliated with SMUD or the Underwriters and are included solely for the convenience of the registered owners of the 2023 Subordinated Bonds. Neither SMUD nor the Underwriters are responsible for the selection or uses of these CUSIP® numbers, and no representation is made as to their correctness on the 2023 Subordinated Bonds or as included herein. The CUSIP® number for a specific maturity is subject to being changed after the execution and delivery of the 2023 Subordinated Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of the 2023 Subordinated Bonds.

SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS

Heidi Sanborn, President
Rosanna Herber, Vice President
Brandon Rose
Nancy Bui-Thompson
Gregg Fishman
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Frankie McDermott, Chief Operating Officer
Jennifer Davidson, Chief Financial Officer
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Lora Anguay, Chief Zero Carbon Officer
Farres Everly, Director, Communications, Marketing and Community Relations
Russell Mills, Treasurer
Lisa Limcaco, Controller

SPECIAL SERVICES

ORRICK, HERRINGTON & SUTCLIFFE LLP
Bond Counsel

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION
Trustee and Paying Agent

BAKER TILLY VIRCHOW KRAUSE, LLP, Madison, Wisconsin
Independent Accountants

PFM FINANCIAL ADVISORS LLC, Philadelphia, Pennsylvania
Municipal Advisor

No dealer, broker, salesperson or other person has been authorized by SMUD or the Underwriters to give any information or to make any representations with respect to the 2023 Subordinated Bonds other than those contained in this Official Statement and, if given or made, such information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell nor the solicitation of an offer to buy, nor shall there be any sale of the 2023 Subordinated Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been obtained from SMUD and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation of, the Underwriters. The information and expressions of opinion stated herein are subject to change without notice. The delivery of this Official Statement shall not, under any circumstances, create any implication that there has been no change in the affairs of SMUD since the date hereof. The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with and as part of their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The 2023 Subordinated Bonds have not been registered under the Securities Act of 1933, as amended, in reliance upon an exemption from the registration requirements contained in such Act. The 2023 Subordinated Bonds have not been registered or qualified under the securities laws of any state.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT

Certain statements included or incorporated by reference in this Official Statement constitute “forward-looking statements.” Such statements generally are identifiable by the terminology used, such as “plan,” “expect,” “estimate,” “budget” or other similar words.

The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. SMUD does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations or events, conditions or circumstances on which such statements are based occur.

This Official Statement, including any supplement or amendment hereto, is intended to be deposited with the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access website. SMUD maintains a website. However, the information presented therein is not part of this Official Statement and should not be relied upon in making investment decisions with respect to the 2023 Subordinated Bonds. The references to internet websites in this Official Statement are shown for reference and convenience only; unless explicitly stated to the contrary, the information contained within the websites is not incorporated herein by reference and does not constitute part of this Official Statement.

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OFFICIAL STATEMENT

Relating to

SACRAMENTO MUNICIPAL UTILITY DISTRICT

[\$[PAR]]*	[\$[PAR]]*
Subordinated Electric Revenue Bonds	Subordinated Electric Revenue Bonds
2023 Series D	2023 Series E
\$100,000,000*	
Subordinated Electric Revenue Refunding Bonds	
2023 Series F	

INTRODUCTION

This Official Statement, including the cover page and Appendices attached hereto, describes the Sacramento Municipal Utility District (“SMUD”), a political subdivision of the State of California (the “State”), its [\$[PAR]]* Subordinated Electric Revenue Bonds, 2023 Series D (the “2023D Subordinated Bonds”), its [\$[PAR]]* Subordinated Electric Revenue Bonds, 2023 Series E (the “2023E Subordinated Bonds”) and its \$100,000,000* Subordinated Electric Revenue Bonds, 2023 Series F (the “2023F Subordinated Bonds” and, together with the 2023D Subordinated Bonds and the 2023E Subordinated Bonds, the “2023 Subordinated Bonds”), in connection with the sale by SMUD of the 2023 Subordinated Bonds. The 2023 Subordinated Bonds are being issued to (i) finance and refinance certain improvements and additions to SMUD’s Electric System, including through the refunding of SMUD’s commercial paper notes, (ii) refund the Subordinated Electric Revenue Bonds, 2019 Series A (the “2019A Refunded Subordinated Bonds”), and (iii) pay certain costs associated with the issuance of the 2023 Subordinated Bonds. See “PLAN OF FINANCE.”

The 2023 Subordinated Bonds are being issued pursuant to Resolution No. 85-11-1 of SMUD, adopted November 7, 1985, as amended and restated by Resolution No. 01-06-10 (the “Subordinate Master Resolution”), as supplemented and amended, and pursuant to applicable California law, including the Municipal Utility District Act (Public Utilities Code Sections 12850 to 12860) (the “Act”), the Revenue Bond Law of 1941 (Government Code Section 54300 *et seq.*) and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (Government Code Section 53580 *et seq.*). The issuance of the 2023 Subordinated Bonds was authorized on May 18, 2023, by three separate resolutions of the Board of Directors of SMUD (the “2023 Supplemental Resolutions”). The Subordinate Master Resolution and all supplemental resolutions, including the 2023 Supplemental Resolutions, are collectively referred to herein as the Subordinate Resolution. See APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION.”

U.S. Bank Trust Company, National Association serves as trustee and paying agent under the Subordinate Resolution (the “Trustee”).

The 2023 Subordinated Bonds and other bonds issued on a parity therewith pursuant to the Subordinate Resolution are collectively referred to herein as the “Subordinated Bonds.” As of May 1, 2023, Subordinated Bonds (including the 2019A Refunded Subordinated Bonds) in the aggregate principal amount of \$200,000,000 were outstanding under the Subordinate Resolution.

* Preliminary, subject to change.

The payment of the principal of and interest on the Subordinated Bonds, including the 2023 Subordinated Bonds, is subordinate to the payment of the principal of and interest on SMUD's Electric Revenue Bonds (the "Senior Bonds") and other Parity Bonds. As of May 1, 2023, Senior Bonds in the aggregate principal amount of \$1,841,715,000 were outstanding. Senior Bonds are issued pursuant to Resolution No. 6649 (the "Senior Bond Resolution") adopted in 1971, as amended and supplemented. See APPENDIX E – "SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION."

The issuance of the 2023 Subordinated Bonds for the purposes described herein, including for the refunding of the 2019A Refunded Subordinated Bonds, is a component of a plan of finance (the "Plan of Finance") that includes the issuance of SMUD's Electric Revenue Refunding Bonds, 2023 Series K (the "2023K Senior Bonds") to refund SMUD's Electric Revenue Refunding Bonds, 2013 Series B (the "2013B Refunded Senior Bonds") and the issuance of SMUD's Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the "2023C Subordinated Bonds") to refund SMUD's Electric Revenue Refunding Bonds, 2013 Series A (the "2013A Refunded Senior Bonds"). The issuance of any one or more series of the 2023 Subordinated Bonds is not contingent upon the implementation of the other components of the Plan of Finance and SMUD is not obligated to issue all series of the 2023 Subordinated Bonds or implement any of the components of the Plan of Finance. Upon the issuance of the 2023 Subordinated Bonds and the refunding of the 2019A Refunded Subordinated Bonds, Subordinated Bonds in the aggregate principal amount of \$[]* will be outstanding. If the Plan of Finance is implemented in whole, upon completion of the Plan of Finance, Senior Bonds in the aggregate principal amount of approximately \$[]* and Subordinated Bonds in the aggregate principal amount of approximately \$[]* are expected to be outstanding. See "PLAN OF FINANCE."

SMUD also issues commercial paper notes (the "Notes") from time to time. As of May 1, 2023, Notes in the principal amount of \$200,000,000 were outstanding. Currently, Notes in the aggregate principal amount of \$300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD's obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds (including the 2023 Subordinated Bonds). Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February and August of 2025. SMUD intends to pay all of the outstanding principal amount of the Notes with the proceeds of the 2023D Subordinated Bonds and the 2023E Subordinated Bonds. See "PLAN OF FINANCE."

SMUD has also previously issued its taxable and tax-exempt revolving notes pursuant to a revolving credit agreement with a commercial bank (collectively, the "Revolving Credit Facility"). As of May 1, 2023, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to \$100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD's payment obligations under the Revolving Credit Facility are payable solely from available revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds (including the 2023 Subordinated Bonds). The current term of the Revolving Credit Facility expires in February 2026.

SMUD is responsible for the acquisition, generation, transmission and distribution of electric power to its service area, which includes most of Sacramento County and small portions of Placer and Yolo

* Preliminary, subject to change.

counties. For the year ended December 31, 2022, SMUD served a population of approximately 1.5 million with a total annual retail load of approximately 10,622 million kilowatt hours (“kWh”). SMUD owns and operates an electric system which, as of March 31, 2023, included generating facilities owned and operated by SMUD with an aggregate generating capacity of approximately 783 megawatts (“MW”), local gas-fired plants owned and operated by a joint powers authority and managed by SMUD with an aggregate generating capacity of approximately 1,081 MW, over which SMUD has exclusive control of dispatch, and purchased power with an aggregate generating capacity of approximately 1,314 MW and transmission and distribution facilities. SMUD’s power requirements exceed its generating capacity and thus SMUD has agreements with others (including the Local Gas-Fired Plants as defined in APPENDIX A) for the purchase of a portion of its power requirements. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – POWER SUPPLY AND TRANSMISSION – Power Supply Resources.” Continuing development of SMUD’s business strategy in response to changing environmental and regulatory requirements has had, and is expected to continue to have, a major effect on SMUD’s power supply planning. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – BUSINESS STRATEGY.”

Pursuant to a Continuing Disclosure Agreement, dated the date of issuance of the 2023 Subordinated Bonds (the “Continuing Disclosure Agreement”) between SMUD and the Trustee, SMUD will covenant for the benefit for the holders of the 2023 Subordinated Bonds and owners of beneficial interest in the 2023 Subordinated Bonds to provide certain financial information and operating data and to provide certain notices. See “CONTINUING DISCLOSURE UNDERTAKING” and APPENDIX G – “FORM OF CONTINUING DISCLOSURE AGREEMENT.”

The information presented in this Introduction is qualified in its entirety by reference to this entire Official Statement and the documents summarized or described herein. This Official Statement, including the Appendices, summarizes the terms of the 2023 Subordinated Bonds, the Subordinate Resolution and certain agreements, contracts and other arrangements, some of which currently exist and others of which may exist in the future. The summaries of and references to all documents, statutes, regulations and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary and reference is qualified in its entirety by reference to each such document, statute, regulation or instrument.

Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION – Certain Definitions” or in the Subordinate Resolution.

PLAN OF FINANCE

SMUD intends to use the proceeds of the 2023D Subordinated Bonds and the 2023E Subordinated Bonds to finance and refinance certain improvements and additions to SMUD’s Electric System, including by reimbursing itself for expenditures previously made for such purposes and by paying Notes in the outstanding principal amount of \$200,000,000* that were issued for such purposes. SMUD intends to use the proceeds of the 2023F Subordinated Bonds to redeem the 2019A Refunded Subordinated Bonds, currently outstanding in the principal amount of \$100,000,000, on the date of delivery of the 2023F Subordinated Bonds. SMUD also intends to use a portion of the proceeds of the 2023 Subordinated Bonds to pay certain costs associated with the issuance of the 2023 Subordinated Bonds.

The issuance of any one series of the 2023 Subordinated Bonds is not conditioned on the issuance of any other series of the 2023 Subordinated Bonds. SMUD is not obligated to issue any series of the 2023 Subordinated Bonds. The issuance of any one series of the 2023 Subordinated Bonds is also not contingent

* Preliminary, subject to change.

upon the implementation of the other components of the Plan of Finance, and SMUD is not obligated to implement any of the components of the Plan of Finance.

Issuance of 2023K Senior Bonds and Refunding of 2013B Refunded Senior Bonds

[Concurrently with the issuance of the 2023 Subordinated Bonds,] SMUD expects to issue approximately \$[]* in principal amount of the 2023K Senior Bonds. The 2023K Senior Bonds are expected to be issued as fixed rate bonds with a final maturity of 2033*. The proceeds of the 2023K Senior Bonds are expected to be used to refund the 2013B Refunded Senior Bonds. In connection with the refunding of the 2013B Refunded Senior Bonds, SMUD expects to terminate a forward starting interest rate swap agreement that was executed in June 2020 to hedge potential interest rate exposure relating to the future refunding of the 2013B Refunded Senior Bonds. SMUD expects that it will receive a termination payment for the termination of the interest rate swap agreement. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Interest Rate Swap Agreements.*”

A portion of the proceeds of the 2023K Senior Bonds, together with other available funds, will be deposited in trust in an escrow fund (the “2013B Escrow Fund”) established under an escrow agreement between SMUD and the Trustee. The moneys so deposited will be invested in direct obligations of the United States of America, the interest on and principal of which will be sufficient to pay the interest on the 2013B Refunded Bonds due on August 15, 2023 (the “2013B Redemption Date”) and to redeem the 2013B Refunded Bonds on the 2013B Redemption Date. The securities and moneys in the 2013B Escrow Fund will not secure the 2023 Subordinated Bonds and will not be available to pay the principal of or interest on the 2023 Subordinated Bonds.

Issuance of 2023C Subordinated Bonds and Refunding of 2013A Refunded Senior Bonds

[Concurrently with the issuance of the 2023C Subordinated Bonds,] SMUD expects to issue approximately \$132,020,000* in principal amount of the 2023C Subordinated Bonds. The 2023C Subordinated Bonds are expected to be issued as variable rate demand bonds bearing interest at daily rates, and supported by a liquidity facility in the form of a standby bond purchase agreement with TD Bank, N.A. The proceeds of the 2023C Subordinated Bonds are expected to be used to refund the 2013A Refunded Senior Bonds. A portion of the proceeds of the 2023C Subordinated Bonds, together with other available funds, will be deposited in trust in an escrow fund (the “2013A Escrow Fund”) established under an escrow agreement between SMUD and the Trustee, in an amount sufficient to pay the interest on the 2013A Refunded Bonds due on August 15, 2023 (the “2013A Redemption Date”) and to redeem the 2013A Refunded Bonds on the 2013A Redemption Date. The moneys so deposited will be invested in direct obligations of the United States of America. The moneys and securities in the 2013A Escrow Fund will not secure the 2023 Subordinated Bonds and will not be available to pay the principal of or interest on the 2023 Subordinated Bonds.

In June 2020, SMUD had entered into a forward starting interest rate swap agreement to hedge potential interest rate exposure relating to the future refunding of the 2013A Refunded Senior Bonds. The swap will become effective on July 12, 2023. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Interest Rate Swap Agreements.*”

* Preliminary, subject to change.

ESTIMATED SOURCES AND USES OF FUNDS

The estimated sources and uses of funds with respect to the 2023 Subordinated Bonds are as follows:

Sources of Funds:

Par Amount of 2023 Subordinated Bonds	\$
Original Issue [Premium/Discount]	
SMUD Contribution	
Total Sources of Funds	\$

Uses of Funds:

Project Costs (including payment of Notes)	
Refunding of 2019A Refunded Subordinated Bonds	\$
Costs of Issuance (including Underwriters' Discount)	
Total Uses of Funds	\$

THE 2023 SUBORDINATED BONDS

The following is a summary of certain provisions of the 2023 Subordinated Bonds. Reference is made to the 2023 Subordinated Bonds for the complete text thereof and to the Subordinate Resolution for a more detailed description of such provisions. The discussion herein is qualified by such reference. *This Official Statement provides information as of its date with respect to 2023 Subordinated Bonds bearing interest in the Term Rate Mode for the initial Term Rate Period only. Owners and prospective purchasers of the 2023 Subordinated Bonds should not rely on this Official Statement for information concerning the 2023 Subordinated Bonds in connection with any conversion of the 2023 Subordinated Bonds to different Interest Rate Mode or to a new Term Rate Period, but should look solely to the offering document to be used in connection with any such conversion.*

General

The 2023D Subordinated Bonds, the 2023E Subordinated Bonds and the 2023F Subordinated Bonds are being issued in the respective principal amounts shown on the cover of this Official Statement. The 2023 Subordinated Bonds will be issued under a book-entry only system, and will be registered in the name of Cede & Co., as nominee for The Depository Trust Company (“DTC”), New York, New York, which will act as bond depository for the 2023 Subordinated Bonds. Principal or Redemption Price of, and interest on the 2023 Subordinated Bonds or the Purchase Price thereof are payable by the Trustee to DTC, which is obligated in turn to remit such principal, Redemption Price, and interest or Purchase Price to its DTC Participants for subsequent disbursement to the beneficial owners of the 2023 Subordinated Bonds. See APPENDIX C – “BOOK-ENTRY SYSTEM”.

The 2023 Subordinated Bonds will be dated the date of initial delivery. The 2023 Subordinated Bonds will initially be issued in the Term Rate Mode and will mature on the dates, bear interest initially at the initial Term Rates, for the initial Term Rate Periods ending on the dates and be subject to mandatory purchase on the initial scheduled Mandatory Purchase Dates as described in the “SUMMARY OF THE OFFERING” following the cover page of this Official Statement. The 2023 Subordinated Bonds will be issued initially only as fully registered 2023 Subordinated Bonds in the denominations of \$5,000 or any integral multiple thereof (the “Authorized Denominations”) while in the Term Rate Mode.

At the option of SMUD and upon certain conditions provided in the Subordinate Resolution, any series of the 2023 Subordinated Bonds may be converted to the Daily Mode, Weekly Mode, Flexible Mode, Index Mode, Direct Purchase Index Mode or Fixed Rate Mode, or may be converted from one Term Rate Period to another Term Rate Period. The 2023 Subordinated Bonds are subject to mandatory tender in the

event of any such conversion related thereto. See “Conversion Between Modes” and “Mandatory Purchase on the Mandatory Purchase Date” herein.

While any series of 2023 Subordinated Bonds may, under certain circumstances, be converted to a Daily Mode, Weekly Mode, Flexible Mode, Index Mode, Direct Purchase Index Mode or Fixed Rate Mode, or from one Term Rate Period to another Term Rate Period, this Official Statement describes the 2023 Subordinated Bonds only during the period in which they bear interest in the Term Rate Mode in the initial Term Rate Periods. Each series of 2023 Subordinated Bonds is subject to mandatory tender in the event of any such conversion related thereto. See “Conversion Between Modes” and “Mandatory Purchase on the Mandatory Purchase Date” herein.

The Term Rate for the initial Term Rate Period for each series of 2023 Subordinated Bonds will be determined prior to the issuance of the 2023 Subordinated Bonds. The Term Rate for any other Term Rate Period for a series of 2023 Subordinated Bonds shall be determined by the applicable remarketing agent no later than the Business Day next preceding the first day of such Term Rate Period for such series of 2023 Subordinated Bonds.

While in the Term Rate Mode, interest on the 2023 Subordinated Bonds shall be payable semiannually on each [February 15] and [August 15], commencing on [August 15], 2023, on any Mandatory Purchase Date therefor and on the Maturity Dates thereof. Interest on the 2023 Subordinated Bonds shall be computed on the basis of a 360-day year comprised of twelve 30-day months.

The Record Date for the payment of interest while a 2023 Subordinated Bond is in the Term Rate Mode is the fifteenth (15th) day (whether or not a Business Day) next preceding each Interest Payment Date.

Subject to the provisions discussed in APPENDIX C – “BOOK-ENTRY SYSTEM,” Principal or Redemption Price will be payable upon surrender of the 2023 Subordinated Bonds at the principal corporate trust office of the Trustee. Interest on the 2023 Subordinated Bonds will be paid by wire transfer within the continental United States of immediately available funds from the Trustee to the registered owner, determined as of the close of business on the applicable Record Date, at its address as shown on the registration books maintained by the Trustee.

Conversion Between Modes

While a series of 2023 Subordinated Bonds is in the Term Rate Mode, conversions to any other Interest Rate Mode or from one Term Rate Period to another Term Rate Period may take place on (i) any day that 2023 Subordinated Bonds of the applicable series are subject to optional redemption if the conversion did not occur, or (ii) the day immediately following the last day of the then-current Term Rate Period, in each case upon not less than 10 days’ prior written notice from the Trustee to the Holders of such 2023 Subordinated Bonds. However, the Trustee need not provide notice to Holders for a Conversion Date occurring on the Business Day following the last day of a Term Rate Period.

Upon such conversion, a series of 2023 Subordinated Bonds will be subject to mandatory purchase on the Mandatory Purchase Date as described herein under “Mandatory Purchase on the Mandatory Purchase Date.” Each conversion of a series of 2023 Subordinated Bonds from one Interest Rate Mode to another Interest Rate Mode or from one Term Rate Period to a new Term Rate Period shall be subject to the conditions set forth in the Subordinate Resolution, including delivery of a Favorable Opinion of Bond Counsel. In addition, SMUD may rescind any election to convert to another Interest Rate Mode or from one Term Rate Period to another Term Rate Period up to 10:00 a.m., New York City time, on the Business Day preceding the proposed conversion date. In the event that the conditions for a proposed conversion to a new Interest Rate Mode or from one Term Rate Period to another Term Rate Period are not met or SMUD

rescinds the direction to convert, (i) such new Interest Rate Mode or new Term Rate Period shall not take effect on the proposed conversion date, notwithstanding any prior notice to the registered owners of such conversion, (ii) such series of 2023 Subordinated Bonds shall remain in its prior Interest Rate Mode or Term Rate Period, and (iii) such series of the 2023 Subordinated Bonds shall be subject to mandatory purchase on the Mandatory Purchase Date as described in the Subordinate Resolution if notice has been sent to the registered owners stating that such Series of 2023 Subordinated Bonds would be subject to mandatory purchase on such date. In no event shall the failure of such series of 2023 Subordinated Bonds to be converted to another Interest Rate Mode or to a new Term Rate Period be deemed to be a default or an Event of Default.

Mandatory Purchase on the Mandatory Purchase Date

While in the Term Rate Mode, each series of 2023 Subordinated Bonds is subject to mandatory purchase at the Purchase Price (as defined below) on (i) the first Business Day following the last day of the Term Rate Period applicable to such series of 2023 Subordinated Bonds and (ii) any Conversion Date applicable to such series of 2023 Subordinated Bonds or the date that otherwise would have been a Conversion Date for such series of 2023 Subordinated Bonds had one of the conditions precedent to such Conversion Date not failed to occur (each a “Mandatory Purchase Date”).

“Purchase Price” means an amount equal to the principal amount of any 2023 Subordinated Bonds purchased on the applicable Mandatory Purchase Date, plus accrued interest to but excluding such Mandatory Purchase Date; provided, however, that (i) if the applicable Mandatory Purchase Date for any 2023 Subordinated Bond is an Interest Payment Date for such 2023 Subordinated Bond, in which case the Purchase Price thereof shall be the principal amount thereof, and interest on such 2023 Subordinated Bond shall be paid to the Holder of such 2023 Subordinated Bond in the normal course and (ii) in the case of a purchase on a Conversion Date or proposed Conversion Date which is preceded by a Term Rate Period and which occurs prior to the day originally established as the last day of such preceding Term Rate Period, the Purchase Price thereof shall be the Redemption Price which would have been applicable to such 2023 Subordinated Bond if the preceding Term Rate Period had continued to the day originally established as its last day, plus accrued interest, if any.

Notice of mandatory tender shall be given by the Trustee in writing to the Holders of such 2023 Subordinated Bonds subject to mandatory purchase no less than 10 days prior to the applicable Mandatory Purchase Date. From and after the Mandatory Purchase Date, interest on such series of 2023 Subordinated Bonds subject to mandatory purchase will cease to accrue.

Source of Funds for Purchase of 2023 Subordinated Bonds

The Trustee shall purchase 2023 Subordinated Bonds subject to mandatory tender for purchase on each Mandatory Purchase Date pursuant to the Subordinate Resolution (“Tendered Bonds”) from the tendering owners at the applicable Purchase Price by wire transfer in immediately available funds. Funds for the payment of such Purchase Price shall be derived solely from the following sources in the order of priority indicated and the Trustee shall not be obligated to provide funds from any other source:

- (i) immediately available funds on deposit in the Remarketing Proceeds Account established for the applicable series of 2023 Subordinated Bonds under the Subordinate Resolution; and
- (ii) moneys of SMUD on deposit in the District Purchase Account established for the applicable series of 2023 Subordinated Bonds under the Subordinate Resolution.

On each Mandatory Purchase Date for a series of 2023 Subordinated Bonds, if the Trustee has not received an amount of remarketing proceeds sufficient to pay the Purchase Price of such Series of 2023

Subordinated Bonds by 12:00 noon, New York City time, on such Purchase Date, the Trustee shall request funds from SMUD in an amount equal to the Purchase Price of all 2023 Subordinated Bonds of such series which have not been successfully remarketed.

Under the Subordinate Resolution, SMUD is obligated to deposit amounts into the District Purchase Account established for the applicable series of 2023 Subordinated Bonds sufficient to pay the Purchase Price of the 2023 Subordinated Bonds of such series to the extent that amounts on deposit in the Remarketing Proceeds Account established for the applicable series of 2023 Subordinated Bonds are insufficient therefor. The failure of SMUD to deposit amounts into the District Purchase Account established for the applicable series of 2023 Subordinated Bonds when SMUD is obligated to deposit such amounts under the Subordinate Resolution will constitute an Event of Default under the Subordinate Resolution.

Inadequate Funds for Tenders

If moneys sufficient to pay the Purchase Price of all Tendered Bonds of a series of 2023 Subordinated Bonds to be purchased on any Mandatory Purchase Date are not available (1) no purchase shall be consummated of Tendered Bonds of such series of 2023 Subordinated Bonds on such Mandatory Purchase Date; (2) all Tendered Bonds of such series of 2023 Subordinated Bonds shall be returned to the Holders thereof; and (3) all remarketing proceeds with respect to such series of 2023 Subordinated Bonds will be returned to the applicable remarketing agent for return to the Persons providing such moneys. All Tendered Bonds of a series will bear interest at a rate of interest of []*% per annum during the period of time from and including the applicable Mandatory Purchase Date to (but not including) the date that all such Tendered Bonds are successfully remarketed, redeemed, purchased or paid (the “Delayed Remarketing Period”).

During this period of time, SMUD may (1) direct the conversion of Tendered Bonds without complying with the applicable notice requirements for such conversion, and (2) upon five Business Days’ notice, redeem Tendered Bonds as a whole or in part on any Business Day at a redemption price equal to the principal amount thereof, together with accrued interest thereon to the date fixed for redemption, without premium. During the Delayed Remarketing Period, interest on Tendered Bonds will be paid to the Holders thereof (i) on the first Business Day of each calendar month and (ii) on the last day of such Delayed Remarketing Period.

Optional Redemption

The 2023 Subordinated Bonds of a series in the Term Rate Mode are subject to redemption at the option of SMUD in whole or in part (provided that no 2023 Subordinated Bonds shall remain Outstanding except in Authorized Denominations) on any date on or after the Call Protection Date for each Term Rate Period applicable to such series of 2023 Subordinated Bonds at a Redemption Price equal to the principal amount, or portions thereof, of the 2023 Subordinated Bonds of such series to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

Mandatory Sinking Fund Redemption

The 2023D Subordinated Bonds are subject to mandatory redemption in part, by lot, on [August 15] in the years shown in the following table, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the date of redemption in an amount equal to the Sinking Fund Installments for such 2023D Subordinated Bonds for such date:

* Preliminary, subject to change.

Years* ([August 15])	Sinking Fund Installment*	Years* ([August 15])	Sinking Fund Installment*
	\$		\$

†

† Stated Maturity

The 2023E Subordinated Bonds are subject to mandatory redemption in part, by lot, on [August 15] in the years shown in the following table, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the date of redemption in an amount equal to the Sinking Fund Installments for such 2023E Subordinated Bonds for such date:

Years* ([August 15])	Sinking Fund Installment*	Years* ([August 15])	Sinking Fund Installment*
	\$		\$

†

† Stated Maturity

The 2023F Subordinated Bonds are subject to mandatory redemption in part, by lot, on [August 15] in the years shown in the following table, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the date of redemption in an amount equal to the Sinking Fund Installments for such 2023F Subordinated Bonds for such date:

Years* ([August 15])	Sinking Fund Installment*	Years* ([August 15])	Sinking Fund Installment*
2042	\$11,245,000	2046	\$12,655,000
2043	11,585,000	2047	13,035,000
2044	11,930,000	2048	13,430,000
2045	12,290,000	2049†	13,830,000

† Stated Maturity

Selection of Bonds to be Redeemed; Notice of Redemption

Whenever provision is made for the redemption of less than all of the 2023 Subordinated Bonds of a series, the Trustee shall select the 2023 Subordinated Bonds of such series to be redeemed, from the outstanding 2023 Subordinated Bonds of such series not previously called for redemption, by lot in any manner which the Trustee deems fair.

Notice of redemption shall be mailed by first-class mail by the Trustee, not less than 20 nor more than 60 days prior to the redemption date, to the Holder of any 2023 Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2023 Subordinated Bonds. Each notice of

* Preliminary, subject to change.

redemption shall state the redemption date, the place of redemption, the principal amount to be redeemed, and shall also state that the interest on the 2023 Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2023 Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the applicable redemption date to pay the applicable redemption price of the 2023 Subordinated Bonds to be redeemed.

Any notice of optional redemption may be rescinded by written notice given to the Trustee by SMUD no later than two Business Days prior to the date specified for redemption.

Notwithstanding the foregoing, notice of redemption shall not be required for 2023 Subordinated Bonds redeemed on a Mandatory Purchase Date.

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DEBT SERVICE SCHEDULE

The following table sets forth the debt service requirements with respect to the 2023 Subordinated Bonds assuming no early redemptions. See also APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Debt Service Requirements.*”

Calendar Year	2023D Subordinated Bonds Principal	2023D Subordinated Bonds Interest ⁽¹⁾	2023E Subordinated Bonds Principal	2023E Subordinated Bonds Interest ⁽²⁾	2023F Subordinated Bonds Principal	2023F Subordinated Bonds Interest ⁽³⁾	Total
	\$	\$	\$	\$			\$

\$	\$						\$
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⁽¹⁾ Based on an assumed interest rate of ___% per annum.
⁽²⁾ Based on an assumed interest rate of ___% per annum.
⁽³⁾ Based on an assumed interest rate of ___% per annum.

SECURITY FOR THE SUBORDINATED BONDS

Limited Obligations; Pledge of Revenues

The Subordinated Bonds, including the 2023 Subordinated Bonds, are revenue bonds and are not secured by the taxing power of SMUD. The principal of and premium, if any, and interest on the Subordinated Bonds (including the 2023 Subordinated Bonds), together with other Parity Subordinated Debt, are payable exclusively from the Net Subordinated Revenues of the Electric System of SMUD. The

Subordinated Bonds and all other Parity Subordinated Debt are secured by a pledge of Revenues, subject to the condition that out of Revenues:

First: There shall be applied all sums required for maintenance and operation costs of the Electric System and all Energy Payments not included in maintenance and operation costs.

Second: There shall be applied all sums required for the payment of the principal of (including any premium thereon) and interest on the Senior Bonds and all other Parity Bonds, together with any sinking fund or reserve fund payments on the Senior Bonds and all other Parity Bonds.

Third: There shall be applied all sums required for the payment of the principal of (including any premium thereon) and interest on the Subordinated Bonds and all other Parity Subordinated Debt, together with any sinking fund or reserve fund payments on the Subordinated Bonds and all other Parity Subordinated Debt.

All remaining Revenues, after making the foregoing allocations, will be available to SMUD for all lawful SMUD purposes.

From time to time, SMUD may deposit in the Rate Stabilization Fund from such remaining Revenues such amounts as SMUD shall determine, provided that deposits in the Rate Stabilization Fund from remaining Revenues in any fiscal year may be made until (but not after) the date 120 days after the end of such fiscal year. SMUD may withdraw amounts from the Rate Stabilization Fund only for inclusion in Revenues for any fiscal year, such withdrawals to be made until (but not after) 120 days after the end of such fiscal year. All interest or other earnings upon deposits in the Rate Stabilization Fund shall be withdrawn therefrom and accounted for as Revenues. No deposit of Revenues to the Rate Stabilization Fund may be made to the extent such Revenues were included in any certificate submitted in connection with the issuance of additional bonds and withdrawal of the Revenues from the Revenues employed in rendering said certificate would have caused noncompliance with the additional bond provisions. See APPENDIX A – “RATES AND CUSTOMER BASE – Rates and Charges” for a description of the balance in the Rate Stabilization Fund.

Neither the credit nor the taxing power of SMUD is pledged to the payment of the Subordinated Bonds and the general fund of SMUD is not liable for the payment thereof. The owners of the Subordinated Bonds cannot compel the exercise of any taxing power of SMUD or the forfeiture of any of its property. The Subordinated Bonds are not a legal or equitable pledge, charge, lien or encumbrance upon any of SMUD’s property (including the Electric System) or upon any of its income, receipts or revenues except the Net Subordinated Revenues of the Electric System to the extent of the pledge thereof contained in the Subordinate Resolution.

Subordinate Pledge

The Subordinated Bonds are subordinate in right of payment to the Senior Bonds and other Parity Bonds. As of May 1, 2023, Senior Bonds in the aggregate principal amount of \$1,841,715,000 were outstanding. Upon completion of the Plan of Finance, \$[]* aggregate principal amount of Senior Bonds will be outstanding. The Senior Bonds are issued pursuant to the Senior Bond Resolution. See APPENDIX E – “SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION” for a description of certain provisions of the Senior Bond Resolution.

* Preliminary, subject to change.

No Reserve Fund

No reserve fund will be established or funded for the benefit of the 2023 Subordinated Bonds.

Rates and Charges

SMUD has covenanted in the Subordinate Resolution to establish and at all times maintain and collect rates and charges for the sale or use of electric energy generated, transmitted, distributed or furnished by SMUD which, together with certain items of other income permitted under the Subordinate Resolution, will yield Revenues at least sufficient, with respect to the ensuing 12 months, to pay and provide for (1) all sums required for Maintenance and Operation Costs and Energy Payments not included in Maintenance and Operation Costs, (2) all payments with respect to Parity Bonds, and (3) the total amount required for the payment of principal and interest, together with any sinking fund or reserve fund payments, on the Subordinated Bonds and all Parity Subordinated Debt, in each case during such 12 months.

For purposes of the calculations of payments to be made pursuant to the Subordinate Resolution, the interest rates on Parity Bonds and Parity Subordinated Debt which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds and Parity Subordinated Debt bear a rate or rates of interest for a known period or periods of time, such rate or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

For purposes of the above calculations of principal of and interest on Parity Bonds or Parity Subordinated Debt, if a Financial Products Agreement has been entered into by SMUD with respect to any Parity Bonds or Parity Subordinated Debt, interest on such Parity Bonds or Parity Subordinated Debt shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds or Parity Subordinated Debt in such fiscal year or period at the rate or rates stated in such Parity Bonds or Parity Subordinated Debt plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

For purposes of the above calculations of principal of and interest on Parity Bonds and Parity Subordinated Debt, Excluded Principal Payments shall be disregarded (but interest on the Parity Bonds and Parity Subordinated Debt to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Bonds and Parity Subordinated Debt are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included.

SMUD has full power to establish rates and charges for all SMUD services, and the levels of such rates are not subject to review or regulation by any other governmental agency, either federal or state.

See Appendix D hereto for the definitions of certain capitalized terms used in this section.

Limitations on Additional Obligations Payable from Net Subordinated Revenues

The Subordinate Resolution provides that SMUD will not, so long as any Subordinated Bonds are outstanding, issue any obligations payable in whole or in part from Net Subordinated Revenues except the following:

(a) Refunding Subordinated Bonds issued to refund all or part of the Parity Bonds or Subordinated Bonds;

(b) Additional Parity Subordinated Debt (including additional Subordinated Bonds under the Subordinate Resolution and additional Parity Subordinated Debt), with an equal lien and charge upon the Net Subordinated Revenues, but only subject to the following conditions:

(1) SMUD shall not then be in default under the Senior Bond Resolution, the Subordinate Resolution or other resolutions authorizing the issuance of Parity Bonds or Parity Subordinated Debt payable out of Revenues; and

(2) SMUD shall certify to the Trustee (i) that Net Revenues, after completion of any improvements proposed to be financed by such additional Parity Subordinated Debt, will be sufficient to pay the principal of and interest (and bond reserve fund requirements, if any) on all Parity Bonds and Parity Subordinated Debt then outstanding and on such additional Parity Subordinated Debt; and (ii) that Net Revenues, for a period of 12 consecutive months during the 24 months immediately preceding the date upon which such Parity Subordinated Debt shall become outstanding, shall have been at least equal to 1.10 times the sum of (i) the annual interest on Parity Bonds and Parity Subordinated Debt, (ii) the principal amount of Parity Bonds and Parity Subordinated Debt falling due, and (iii) the amount of minimum sinking fund payments falling due on Parity Bonds and Parity Subordinated Debt, all as computed for the year in which such sum shall then be a maximum, including both the then outstanding Parity Bonds and Parity Subordinated Debt and the Parity Subordinated Debt then proposed to be issued.

The calculation described above shall be made by taking the following into consideration:

(A) if rates and charges in effect on the date upon which such Parity Subordinated Debt will become outstanding will be greater than those in effect during the entire twelve months elected for the foregoing computation, then the Net Revenues for said period of twelve months may be augmented by the estimated increase in Net Revenues computed to accrue to the Electric System in the first twelve months during which such rates and charges shall be in effect;

(B) if such Parity Subordinated Debt or any portion thereof shall be issued for the purpose of acquiring an existing revenue-producing electric system, the estimated pro forma net revenues of such existing system (calculated on the basis of assumed SMUD ownership and operation during such period but otherwise on the basis of actual gross revenues of such existing system at the rates actually charged therefor) for the preceding twelve months may be added to the actual Net Revenues of the Electric System for the twelve months elected for said computation and treated as if actually received by the Electric System during those twelve months;

(C) for purposes of the above calculations of principal of and interest on Parity Subordinated Debt, Excluded Principal Payments shall be disregarded (but interest on the Parity Subordinated Debt to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Subordinated Debt are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included;

(D) for purposes of the above calculations, the interest rates on Parity Bonds and Parity Subordinated Debt which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds and Parity Subordinated Debt bear a rate or rates of interest for a known period or periods of time, such interest rate or rates for such period or periods, and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate; and

(E) For purposes of the above calculations of principal of and interest on Parity Bonds and Parity Subordinated Debt, if a Financial Products Agreement has been or is being entered into by SMUD with respect to any Parity Bonds or Parity Subordinated Debt, interest on such Parity Bonds or Parity Subordinated Debt shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds or Parity Subordinated Debt in such fiscal year or period at the rate or rates stated in such Parity Bonds or Parity Subordinated Debt plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

(c) Revenue bonds which are junior and subordinate to the payment of the principal, premium, interest and reserve fund requirements for the Subordinated Bonds and all Parity Subordinated Debt and which subordinated revenue bonds are payable as to principal, premium, and interest, and also reserve fund requirements, if any, only out of Net Subordinated Revenues after the prior payment of all amounts required to be paid under the Subordinate Resolution from Net Subordinated Revenues for principal, premium, interest and reserve fund requirements for the Subordinated Bonds and all Parity Subordinated Debt, as the same become due and payable.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SMUD owns and operates an electric system that has provided retail electric service since 1946. SMUD's current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. For a full description of SMUD, its history, organization, operations, and financial performance, certain developments in the energy markets, certain factors affecting the electric utility industry, including impacts from the COVID-19 pandemic, and certain regulatory and other matters, see APPENDIX A – "INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT."

ABSENCE OF LITIGATION REGARDING THE 2023 SUBORDINATED BONDS

SMUD is not aware of any action, suit or proceeding, threatened or pending, to restrain or enjoin the issuance, sale or delivery of the 2023 Subordinated Bonds, or in any way contesting or affecting the validity of the 2023 Subordinated Bonds or any of the proceedings of SMUD taken with respect to the 2023 Subordinated Bonds. SMUD is not aware of any action, suit or proceeding, threatened or pending, questioning the corporate existence of SMUD, or the title of the officers of SMUD to their respective offices, or the power and authority of SMUD to execute and deliver the 2023 Subordinated Bonds. For a description of certain litigation in which SMUD is involved, see APPENDIX A – "INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – LEGAL PROCEEDINGS."

UNDERWRITING

BofA Securities, Inc. ("BofA") has agreed, subject to certain customary conditions to closing, to purchase the 2023D Subordinated Bonds and the 2023E Subordinated Bonds from SMUD at an aggregate purchase price of \$_____ (being the aggregate principal amount of the 2023D Subordinated Bonds and the 2023E Subordinated Bonds, plus original issue premium of \$_____, and less an underwriter's discount of \$_____). BofA will be obligated to purchase all 2023D Subordinated Bonds and 2023E Subordinated Bonds if any of the 2023D Subordinated Bonds or 2023E Subordinated Bonds are purchased.

Barclays Capital Inc. ("Barclays") has agreed, subject to certain customary conditions to closing, to purchase the 2023F Subordinated Bonds from SMUD at a purchase price of \$_____ (being the aggregate principal amount of the 2023F Bonds, plus original issue premium of \$_____, and less an

underwriter's discount of \$ _____). Barclays will be obligated to purchase all 2023F Subordinated Bonds if any 2023F Subordinated Bonds are purchased.

BofA and Barclays (collectively, the "Underwriters" and each an "Underwriter") have agreed to make a public offering of the 2023 Subordinated Bonds at the initial offering price set forth on the cover page hereof. The 2023 Subordinated Bonds may be offered and sold to certain dealers (including underwriters and other dealers depositing such bonds into investment trusts) at prices lower than such public offering price, and such public offering price may be changed, from time to time, by the Underwriters.

BofA, an Underwriter, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, BofA may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA may compensate MLPF&S as a dealer for its selling efforts with respect to the 2023 Subordinated Bonds.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for SMUD for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of, or issued for the benefit of, SMUD.

BofA Securities, Inc. is an affiliate of Bank of America, N.A. which has extended credit in other transactions to SMUD.

MUNICIPAL ADVISOR

SMUD has retained PFM Financial Advisors LLC, as Municipal Advisor in connection with various matters relating to the delivery of the 2023 Subordinated Bonds. The Municipal Advisor assumes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. The Municipal Advisor is an independent advisory firm and is not engaged in underwriting or distribution of securities. The Municipal Advisor will receive compensation that is contingent upon the sale, issuance and delivery of the 2023 Subordinated Bonds.

APPROVAL OF LEGAL PROCEEDINGS

The validity of the 2023 Subordinated Bonds and certain other legal matters are subject to the approval of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. The approving opinion of Bond Counsel will be delivered with the 2023 Subordinated Bonds in substantially the form appearing in APPENDIX F. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Certain legal matters will be passed on for the Underwriters by Nixon Peabody LLP, San Francisco, California, counsel to the Underwriters.

FINANCIAL STATEMENTS

SMUD's audited, consolidated financial statements for the years ended December 31, 2022 and December 31, 2021 are included in APPENDIX B attached to this Official Statement. These financial statements have been audited by Baker Tilly Virchow Krause, LLP, Madison, Wisconsin (the "Auditor"), for the periods indicated and to the extent set forth in their report thereon and should be read in their entirety. SMUD has not requested nor did it obtain permission from the Auditor to include the audited, consolidated financial statements as an appendix to this Official Statement. Accordingly, the Auditor has not performed any procedures to review the financial condition or operations of SMUD subsequent to the date of its report included therein, nor has it reviewed any information contained in this Official Statement.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD ("Bond Counsel"), based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2023 Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code") and is exempt from State of California personal income taxes. Bond Counsel is of the further opinion that interest on the 2023 Subordinated Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. Bond Counsel observes that, for tax years beginning after December 31, 2022, interest on the 2023 Subordinated Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2023 Subordinated Bonds. A complete copy of the proposed form of opinion of Bond Counsel is set forth in APPENDIX F hereto.

To the extent the issue price of any maturity of the 2023 Subordinated Bonds is less than the amount to be paid at maturity of such 2023 Subordinated Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2023 Subordinated Bonds), the difference constitutes "original issue discount," the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the 2023 Subordinated Bonds which is excluded from gross income for federal income tax purposes and exempt from State of California personal income taxes. For this purpose, the issue price of a particular maturity of the 2023 Subordinated Bonds is the first price at which a substantial amount of such maturity of the 2023 Subordinated Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2023 Subordinated Bonds accrues daily over the term to maturity of such 2023 Subordinated Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2023 Subordinated Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2023 Subordinated Bonds. Beneficial Owners of the 2023 Subordinated Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2023 Subordinated Bonds with original issue discount, including the treatment of Beneficial Owners who do not purchase such 2023 Subordinated Bonds in the original offering to the public at the first price at which a substantial amount of such 2023 Subordinated Bonds is sold to the public.

2023 Subordinated Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) ("Premium Bonds") will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest

received, and a Beneficial Owner's basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2023 Subordinated Bonds. SMUD has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2023 Subordinated Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the 2023 Subordinated Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2023 Subordinated Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel's attention after the date of issuance of the 2023 Subordinated Bonds may adversely affect the value of, or the tax status of interest on, the 2023 Subordinated Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel is of the opinion that interest on the 2023 Subordinated Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the 2023 Subordinated Bonds may otherwise affect a Beneficial Owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner's other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2023 Subordinated Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2023 Subordinated Bonds. Prospective purchasers of the 2023 Subordinated Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the 2023 Subordinated Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of SMUD, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. SMUD has covenanted, however, to comply with the requirements of the Code.

Bond Counsel's engagement with respect to the 2023 Subordinated Bonds ends with the issuance of the 2023 Subordinated Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend SMUD or the Beneficial Owners regarding the tax-exempt status of the 2023 Subordinated Bonds in the event of an audit examination by the IRS. Under current procedures, Beneficial Owners would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which SMUD legitimately disagrees may not be practicable. Any action of the IRS,

including but not limited to selection of the 2023 Subordinated Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2023 Subordinated Bonds, and may cause SMUD or the Beneficial Owners to incur significant expense.

Payments on the 2023 Subordinated Bonds generally will be subject to U.S. information reporting and possibly to “backup withholding.” Under Section 3406 of the Code and applicable U.S. Treasury Regulations issued thereunder, a non-corporate Beneficial Owner of 2023 Subordinated Bonds may be subject to backup withholding with respect to “reportable payments,” which include interest paid on the 2023 Subordinated Bonds and the gross proceeds of a sale, exchange, redemption, retirement or other disposition of the 2023 Subordinated Bonds. The payor will be required to deduct and withhold the prescribed amounts if (i) the payee fails to furnish a U.S. taxpayer identification number (“TIN”) to the payor in the manner required, (ii) the IRS notifies the payor that the TIN furnished by the payee is incorrect, (iii) there has been a “notified payee underreporting” described in Section 3406(c) of the Code or (iv) the payee fails to certify under penalty of perjury that the payee is not subject to withholding under Section 3406(a)(1)(C) of the Code. Amounts withheld under the backup withholding rules may be refunded or credited against a Beneficial Owner’s federal income tax liability, if any, provided that the required information is timely furnished to the IRS. Certain Beneficial Owners (including among others, corporations and certain tax-exempt organizations) are not subject to backup withholding. The failure to comply with the backup withholding rules may result in the imposition of penalties by the IRS.

CONTINUING DISCLOSURE UNDERTAKING

Pursuant to the Continuing Disclosure Agreement, SMUD will covenant for the benefit of the holders and the “Beneficial Owners” (as defined in the Continuing Disclosure Agreement) of the 2023 Subordinated Bonds to provide certain financial information and operating data relating to SMUD by not later than 180 days after the end of each of SMUD’s fiscal years (presently, each December 31), commencing with the report for the year ending December 31, 2023 (the “Annual Report”), and to provide notices of the occurrence of certain listed events with respect to the 2023 Subordinated Bonds. The Annual Report will be filed by or on behalf of SMUD with the Municipal Securities Rulemaking Board (the “MSRB”) through its Electronic Municipal Market Access system (“EMMA”) and any notices of such listed events will be filed by or on behalf of SMUD with the MSRB through EMMA. The specific nature of the information to be contained in the Annual Report and the notices of listed events are set forth in the form of the Continuing Disclosure Agreement which is included in its entirety in APPENDIX G hereto. SMUD’s covenant will be made in order to assist the Underwriters in complying with Securities and Exchange Commission Rule 15c2-12.

[In a limited number of circumstances, certain of the annual reports, audited financial statements or listed event filings required to be made by SMUD during the last five years under its continuing disclosure undertakings were not connected to all of the CUSIP numbers of the bonds subject to the continuing disclosure undertakings. In addition, SMUD entered into two subordinated forward starting interest rate swaps in [December 2019][March 2020] and filed a notice of the interest rate swaps with the MSRB through EMMA in April 2020. A notice of rating upgrade on October 6, 2020, by Moody’s Investors Service of the Northern California Gas Authority No. 1 Gas Project Revenue Bonds, Series 2007B, was also not filed until October 28, 2020.]

RATINGS

Fitch Ratings, Inc. (“Fitch”) and S&P Global Ratings (“S&P”) have assigned ratings of “[AA (stable outlook)]” and “[AA (stable outlook)],” respectively, to the 2023 Subordinated Bonds. Such ratings reflect only the views of such organizations and are not a recommendation to buy, sell or hold the 2023 Subordinated Bonds. Explanations of the significance of such ratings may be obtained only from the

respective rating agencies. SMUD has furnished to Fitch and S&P certain information and materials concerning the 2023 Subordinated Bonds and itself. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that such ratings will continue for any given period or that they will not be revised downward, suspended or withdrawn entirely by the respective rating agencies, if in the judgment of such rating agency, circumstances so warrant. SMUD has not, other than as described under “CONTINUING DISCLOSURE UNDERTAKING” above, and the Underwriters have not undertaken any responsibility either to bring to the attention of the holders or beneficial owners of the 2023 Subordinated Bonds any proposed revision, suspension or withdrawal of any rating on the 2023 Subordinated Bonds or to oppose any such proposed revision, suspension or withdrawal. Any such downward revision, suspension or withdrawal of such ratings may have an adverse effect on the market price or marketability of the 2023 Subordinated Bonds.

MISCELLANEOUS

This Official Statement includes descriptions of the terms of the 2023 Subordinated Bonds, power purchase agreements with certain other parties, pooling and other agreements, the Subordinate Resolution and certain provisions of the Act. Such descriptions do not purport to be complete, and all such descriptions and references thereto are qualified in their entirety by reference to each such document.

Copies of the Subordinate Resolution, which forms a contract with the Holders of the 2023 Subordinated Bonds, will be made available upon request.

This Official Statement has been duly authorized by the Board of Directors of SMUD.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Chief Executive Officer and General Manager

APPENDIX A

**INFORMATION REGARDING
SACRAMENTO MUNICIPAL UTILITY DISTRICT**

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SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS

Heidi Sanborn, President
Rosanna Herber, Vice President
Brandon Rose
Nancy Bui-Thompson
Gregg Fishman
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Frankie McDermott, Chief Operating Officer
Jennifer Davidson, Chief Financial Officer
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Lora Anguay, Chief Zero Carbon Officer
Farres Everly, Chief Marketing & Communications Officer
Russell Mills, Treasurer
Lisa Limcaco, Controller

INTRODUCTION

General

The Sacramento Municipal Utility District (“SMUD”) owns and operates an electric system that has provided retail electric service since 1946. SMUD’s current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. See “THE SERVICE AREA AND ELECTRIC SYSTEM – The Service Area.”

Independent Governance

SMUD is an independently run community-owned organization. SMUD is not required by law to transfer any portion of its collections from customers to any local government.

SMUD is governed by a Board of Directors (the “Board”), which consists of seven directors elected by ward for staggered four-year terms. The Board determines policy and appoints the Chief Executive Officer and General Manager, who is responsible for SMUD’s overall management and day-to-day operations. The Chief Executive Officer and General Manager is responsible for the hiring and removal of all employees, other than the Chief Legal and Government Affairs Officer and General Counsel, the Internal Auditor and the Special Assistant to the Board, who are hired and may be removed only by the Board. The employment status of nearly all SMUD employees is governed by a civil service system administered by the Chief Executive Officer and General Manager.

The Board elects its President and Vice President annually to take office in January. The current members of the Board are as follows:

<u>Name</u>	<u>Occupation</u>	<u>Ward</u>	<u>Term Expires</u>
Brandon Rose.....	Air Pollution Specialist, California Environmental Protection Agency	Ward 1	December 31, 2024
Nancy Bui-Thompson.....	Chief Information Officer, Wellspace Health	Ward 2	December 31, 2024
Gregg Fishman	Communications Specialist	Ward 3	December 31, 2026
Rosanna Herber, Vice-President...	Retired Utility Director	Ward 4	December 31, 2026
Rob Kerth	Business Owner	Ward 5	December 31, 2024
Dave Tamayo.....	Retired Environmental Specialist	Ward 6	December 31, 2026
Heidi Sanborn, President	Executive Director, National Stewardship Action Council	Ward 7	December 31, 2026

SMUD’s senior management consists of the following executives:

Chief Executive Officer & General Manager. Paul Lau was named chief executive officer and general manager (“CEO & GM”) of SMUD in October 2020. He reports to the SMUD Board of Directors. As CEO & GM, he leads the sixth largest community-owned electric utility in the nation, serving a population of approximately 1.5 million residents and managing a \$2.1 billion budget. Mr. Lau previously served as SMUD’s Chief Grid Strategy & Operations Officer and has held several other executive leadership positions during his 41-year career at SMUD. He serves on several national and local boards, including the Large Public Power Council, California Municipal Utilities Association, American Public Power Association, and Smart Electric Power Alliance, and as a Commissioner of the Balancing Authority of Northern California (“BANC”). A registered professional electrical engineer in the State of California

(the “State”), Mr. Lau received his bachelor’s degree in electrical power engineering from California State University, Sacramento.

Chief Customer Officer. Brandy Bolden reports to the CEO & GM and oversees SMUD’s Customer and Community Services business unit. She is responsible for customer experience delivery across our residential and commercial customer segments. She provides leadership and oversight of customer operations including customer care and revenue management, business intelligence, strategic account management, customer experience and segmentation strategy, channel management, customer program and service delivery, and special assistance. She is also responsible for commercial development and business attraction and oversees Community Energy Services, which provides services and support for community choice aggregators. Since joining SMUD in 2003, Brandy has demonstrated strong leadership and held a variety of senior leadership roles, including leading the Customer & Community Services project management office and the dual role of director of Customer Care and Revenue Operations. Ms. Bolden led the team responsible for implementing time-of-day rates, streamlining the meter-to-cash processes, delivering key billing and payment experience enhancements and recognizing operational efficiencies that resulted in sustained annual savings for SMUD. Ms. Bolden holds a Bachelor of Arts in Sociology from University of California, Davis.

Chief Information Officer. Suresh Kotha reports to the CEO & GM and is responsible for SMUD’s information technology strategy, operations, infrastructure, IT Project Management Office, enterprise innovation process, and cybersecurity. More recently, Mr. Kotha has been leading many technology efforts that are integral to developing a grid of the future that will help us achieve our zero-carbon goal, including our Advanced Distribution Management System, the software platform that supports the full suite of distribution management and optimization, and next-generation network upgrades. Mr. Kotha joined SMUD in 2002 as a principal technical developer, with responsibility for designing and leading implementation and upgrades of multiple technology systems, including the SAP software platform and our meter-to-cash systems. He holds a Master of Technology in Computer Science from Jawaharlal Nehru Technology University and a Bachelor of Engineering in Electronics & Communications Engineering from Gulbarga University.

Chief Diversity Officer. Jose Bodipo-Memba reports to the CEO & GM and is responsible for human resources, workforce diversity and inclusion, workforce business planning and SMUD’s Sustainable Communities program. Mr. Bodipo-Memba joined SMUD in 2010 as an environmental specialist and became manager of Environmental Services in 2016. He most recently served as SMUD’s first director of Sustainable Communities. Mr. Bodipo-Memba holds a Bachelor of Arts degree in history from University of California, Berkeley and Masters of Business Administration from Drexel University.

Chief Strategy Officer. Scott Martin reports to the CEO & GM and is responsible for looking holistically at all strategies across the company and driving prioritization including zero carbon, rates and pricing, enterprise strategic planning and enterprise prioritization. Mr. Martin is a seasoned executive with more than 30 years of experience. Prior to assuming this role, Mr. Martin was a director for resource planning and new business strategy. Previous experience also includes customer strategy planning supervisor. Mr. Martin joined SMUD in 1999 and holds a Bachelor of Arts degree in economics from the University of California, Berkeley and a master of arts degree in economics from the University of Nevada, Las Vegas.

Chief Legal & Government Affairs Officer and General Counsel. Laura Lewis was named general counsel for SMUD in April 2014. In this position she serves as chief lawyer and manages SMUD’s legal office and its staff of eight attorneys. She also serves as the secretary to SMUD’s elected board of directors. She reports to the Board and to the CEO & GM and has responsibility for all legal matters in which SMUD is a party to, or has an interest in. Ms. Lewis also oversees SMUD’s government affairs and

reliability compliance department. In this capacity, she is responsible for management and coordination of all legislative matters and regulatory requirements affecting SMUD at the state and federal level, including the FERC-NERC electric reliability standards. Ms. Lewis joined SMUD in 1997 as a staff attorney, serving in that capacity through 1999, after which she moved to the San Francisco law firm Davis Wright Tremaine. In 2002, she returned to SMUD as a senior attorney. In 2010, she became assistant general counsel and in 2013 was appointed chief assistant general counsel. She holds a juris doctorate from McGeorge School of Law, where she won membership in the Order of the Coif honor society. She holds a bachelor's degree in political science from the University of California, San Diego and is a member of the American Bar Association, the Energy Bar Association, and the State Bar of California.

Chief Operating Officer. Frankie McDermott reports to the CEO & GM and is responsible for providing strategic leadership and tactical oversight related to the safe and reliable transmission and delivery of energy to customers, ensuring efficient planning, construction, operation and maintenance of transmission, and distribution facilities. This position has primary responsibility for the processes and functions related to system reliability and operations across SMUD. The Chief Operating Officer is also the safety leader for the enterprise, leader of operational efficiency and responsible for all non-IT capital investments. Prior to this role, Mr. McDermott served as Chief Energy Delivery Officer and Chief Customer Officer, responsible for SMUD's overall retail strategy. From 2010 to 2014, he served as customer services director, which included managing relationships with customer segments as SMUD moved forward with smart-grid technologies. Prior to that, he served as manager of enterprise performance and held positions in supply chain and in general services. Before joining SMUD in 2003, Mr. McDermott served in management roles in the semiconductor industry at NEC Electronics in Roseville, California and in Ireland. After engineering school in Ireland, he earned an MBA from Golden Gate University and completed the Advanced Management Program at the Haas School of Business at the University of California Berkeley.

Chief Zero Carbon Officer. Lora Anguay reports to the CEO & GM and is responsible for leadership oversight of SMUD's Energy Supply which includes Energy Trading and Contracts and SMUD's Power Generation Assets. This role is also responsible for the delivery of SMUD's plan to provide 100% carbon free energy resources by 2030. This includes obtaining new grants and partnerships, overseeing research and development, designing distributed energy resource programs, enabling processes to settle distributed energy transactions with SMUD's customers and transitioning SMUD's power generation assets and energy contracts to zero carbon resources. Prior to assuming this role, Ms. Anguay was the director of Distribution Operations & Maintenance and was responsible for the day-to-day operations of SMUD's electric distribution grid. Before that she was an engineering designer, process control supervisor, project manager for smart meter deployment, a senior project manager for smart grid distribution automation and supervisor in Grid Assets. Before SMUD, she worked for Oracle Corporation as a finance manager and is a veteran who served in the United States Coast Guard. Ms. Anguay joined SMUD in 2004 and holds a Bachelor of Science degree in business administration from California State University, Sacramento.

Chief Financial Officer. Jennifer Davidson reports to the CEO & GM and is responsible for corporate accounting, procurement, treasury operations, risk management, and planning and budgets functions as well as key corporate services, including facilities, security, emergency operations and warehouse and fleet. Ms. Davidson joined SMUD in 2006 and previously served as director of budget, enterprise performance and risk management. Before joining SMUD, Ms. Davidson held management positions with investor-owned utility Southern California Edison and software and services provider Amdocs. She holds a bachelor's degree in geography from the University of California, Los Angeles.

Chief Marketing & Communications Officer. Farres Everly reports to the CEO & GM and since 2009 has been responsible for oversight of the SMUD brand, all external and internal strategic marketing and communications activities and campaigns and SMUD's outreach efforts to the community and the

State's capital region, including volunteerism, events and sponsorships. He previously served as the Director Marketing and Communications. Prior to joining SMUD, Mr. Everly held marketing leadership positions at VSP Vision Care, The Money Store and the Sacramento Metropolitan Chamber of Commerce. He holds a bachelor's degree in Journalism from California State University, Chico.

Treasurer. Russell Mills reports to the CFO. He oversees all treasury operations, including debt and cash management, banking, financial planning and forecasting, enterprise and commodity risk management, property and casualty insurance, and is responsible for developing and implementing capital borrowing strategies. Mr. Mills also serves as treasurer for the Transmission Agency of Northern California ("TANC"), the Central Valley Financing Authority ("CVFA"), the Sacramento Cogeneration Authority ("SCA"), the Sacramento Municipal Utility District Financing Authority ("SFA"), the Sacramento Power Authority ("SPA"), the Northern California Gas Authority No. 1 ("NCGA"), the Northern California Energy Authority ("NCEA") and BANC. Before joining SMUD in 2018 as Treasurer, Mr. Mills served as Chief Financial Officer of Southern California Public Power Authority. He also served as the Chief Financial Officer of the Power Supply Program at the California Department of Water Resources. He holds an MBA from Loyola Marymount University, and a bachelor's degree in economics from Towson University in Baltimore, Maryland. Mr. Mills also holds the Energy Risk Professional (ERP) designation and is a CFA level II candidate.

Controller. Lisa Limcaco reports to the CFO and is responsible for accounting and financial reporting at SMUD. Prior to her appointment as controller in 2020, Ms. Limcaco served as an assistant controller, manager of customer value, performance and projects, senior energy commodity specialist and as principal accountant for SMUD's joint powers authorities. Ms. Limcaco also serves as controller for TANC, CVFA, SCA, SFA, SPA, NCGA, NCEA and BANC. Before joining SMUD in 2010 as a senior accountant, Ms. Limcaco had 12-years' experience as the Director of Accounting and controller for a food service provider in Sacramento and over 13-years' experience in public accounting including audit manager at Price Waterhouse LLP. Ms. Limcaco holds a bachelor's degree in accounting from the University of Hawaii, a Master of Business Administration from Sacramento State University and is a Certified Public Accountant in the State.

THE SERVICE AREA AND ELECTRIC SYSTEM

The Service Area

SMUD is the primary distributor of electric power within an area of approximately 900 square miles in central California. The service area includes the State Capital, Sacramento, the populous areas principally to the northeast and south of the City of Sacramento (the "City" or "Sacramento") and the agricultural areas to the north and south. The City is located 85 miles northeast of San Francisco.

SMUD's electric system supplies power to a population of approximately 1.5 million with a total annual retail load of approximately 10,622 million kilowatt-hours ("kWh") for the year ended December 31, 2022. As the capital of the nation's most populous state, Sacramento benefits from the historically stabilizing influence of a large government sector. Sacramento is home to the State government headquarters, the Sacramento County seat, the City government and various special districts that combine to make government the largest single employment sector in the Sacramento area. Information technology, transportation, education and health services, leisure and hospitality, and construction round out the other major sectors of employment and industry in the area.

SMUD's annual peak load has averaged 3,113 Megawatts ("MW") over the last three years, with SMUD's record peak load of 3,299 MW occurring on July 24, 2006. In 2022, SMUD recorded its second highest peak load of 3,292 MW. SMUD reviews its load forecast, at a minimum, on an annual basis.

The Electric System

SMUD owns and operates an integrated electric system that includes generation, transmission and distribution facilities.

SMUD supplies power to its bulk power substations through a 230 kilovolt (“kV”) and 115 kV transmission system. This system transmits power from SMUD’s generation plants and interconnects with Pacific Gas & Electric (“PG&E”) and the Western Area Power Administration (“WAPA”). Power is distributed throughout Sacramento County via a 69 kV sub-transmission system with the exception of the City’s downtown area, which is served from the 115 kV transmission system. The downtown area is served from 115/12 kV and 115/21 kV substations. The distribution system serving the remainder of SMUD’s service territory is comprised of 69/12 kV substations with overhead and underground 12 kV distribution circuits.

BUSINESS STRATEGY

General

SMUD’s Board of Directors has established the following purpose and vision statements: “SMUD’s purpose is to enhance the quality of life for our customers and community by providing reliable and affordable electricity, and leading the transition to a clean energy future. SMUD’s vision is to be a trusted and powerful partner in achieving an inclusive, zero carbon economy. SMUD will leverage its relationships to accelerate innovation, ensure energy affordability and reliability, protect the environment, eliminate greenhouse gas emissions, catalyze economic and workforce development, promote environmental justice, and enhance community vitality for all.” The Board has adopted a set of Strategic Directions with related metrics, which it considers essential for the success of SMUD and for serving SMUD’s customers. These include competitive rates, access to credit markets, reliability, customer relations, environmental leadership, resource planning, enterprise risk management and safety. Some of the general elements in SMUD’s business strategy are:

- developing and maintaining a sustainable and reliable power supply to meet demand growth consistent with State mandates and the Board’s directions for renewable energy and the reduction of carbon emissions to zero by 2030. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *2030 Zero Carbon Plan*”;
- working closely with customers to provide the information, tools and incentives to assist them to more efficiently manage energy use, which will contribute to meeting greenhouse gas (“GHG”) emission targets and managing needle peak demand requirements (those 40 or so hours of the year with extreme temperatures when customer demand surges by up to 400 additional MW);
- managing price, volumetric and credit risks associated with energy and natural gas procurement;
- attracting, developing and retaining a diverse, skilled and engaged workforce that reflects SMUD’s values and is committed to achieving SMUD’s mission;
- retaining local decision making authority and operational independence; and
- collaborating regionally to attract new businesses and grow existing business to diversify and strengthen the Sacramento economy.

SMUD’s long-range business strategy focuses in part on ensuring financial stability by establishing rates that provide an acceptable fixed charge coverage ratio on a consolidated basis, taking into consideration the impact of capital expenditures and other factors on cash flow. SMUD’s Board policy sets

a minimum fixed charge coverage ratio of 1.50 times for annual budgets, though it generally plans to meet a minimum fixed charge coverage ratio of 1.70 times. Over the past ten years, the actual fixed charge coverage ratio has averaged 2.06 times on a consolidated basis. SMUD also manages its liquidity position by planning for a minimum of 150 days cash on hand and planning to maintain at least \$150 million of available capacity under its commercial paper and line of credit program. SMUD's commercial paper and line of credit program is currently authorized for \$400 million aggregate principal amount outstanding at any one time. As of March 1, 2023, SMUD had \$200 million aggregate principal amount of its commercial paper notes outstanding and \$200 million of the authorized aggregate principal amount of its commercial paper and line of credit program available for use. SMUD uses cash on hand and commercial paper and a line of credit to fund capital expenditures, then issues debt to reimburse itself for cash expended for qualified capital expenditures or to pay down the outstanding principal amount of its commercial paper program and line of credit. Over the past ten years, the days cash on hand has averaged 222. The resolutions securing SMUD's Senior Bonds and Subordinated Bonds (each as defined under the caption "CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS" below) do not require SMUD to maintain a minimum fixed charge coverage ratio, minimum days cash on hand or minimum available capacity under its commercial paper program and line of credit.

In addition, SMUD's business strategy focuses on servicing its customers in a progressive, forward-looking manner, addressing current regulatory and legislative issues and potential competitive forces.

Serving SMUD's Customers

SMUD continually looks for ways to better serve and partner with its customers to further strengthen customer loyalty, while providing reasonable product pricing. SMUD also has a focused effort to assist and incentivize customers to manage energy use more efficiently, which will contribute to meeting GHG emission targets and managing peak demand requirements as noted below.

Digital Enhancements. Customers are increasingly turning to digital channels including SMUD's mobile application, SMUD.org, e-mail and social media to interact and do business with SMUD. SMUD has delivered many digital enhancements, including bill pay functionality; online payment arrangements; start/stop/transfer move service; view of energy usage, chat, an enhanced outage map including a newly launched meter test functionality; and the SMUD Energy Store, which is an online marketplace for energy-related products. SMUD plans to continue efforts to provide more personalized digital customer experiences.

Advanced Metering, Infrastructure and Rate Design. As a community-owned organization, SMUD is dedicated to providing the tools and transparency in customer energy usage to enable customers to easily and positively affect energy usage, energy cost, and climate change. In 2012 SMUD installed smart technology, including 617,000 digital communicating smart meters, distribution automation systems and equipment to facilitate load management. The advanced technology has allowed SMUD to deliver tools such as text and e-mail bill alerts and online energy usage comparison charts to help customers manage energy use. SMUD has leveraged smart grid investments to improve reliability, reduce losses, reduce power quality issues and improve customer service through better, more timely information.

Time-of-Day Rates. On June 15, 2017, the Board approved time-of-day ("TOD") rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018 and was completed in the fourth quarter of 2019.

All of SMUD's business customers are also on time-based rates. On June 24, 2019, the Board approved an update to the commercial TOD rates to improve consistency and better align commercial rates with current energy market prices. Due to the impacts of the COVID-19 pandemic on SMUD's operations

and priorities, on August 20, 2020, the Board postponed the implementation of the commercial rate restructure for one year. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges.”

Renewable Options. SMUD’s customers have been increasingly interested in distributed energy resources, mainly through the installation of solar systems. As of January, 2023, approximately 47,615 of SMUD’s residential and commercial customers, approximately 7% of retail customers, had installed solar systems, representing approximately 324 MW of solar installations.

As the cost of energy storage continues to decline, SMUD anticipates an increase in behind-the-meter energy storage, mainly through the installation of battery storage systems. As of January 2023, approximately 1,183 of SMUD’s residential and commercial customers, approximately [2]% of retail customers, had installed storage systems, representing approximately 8 MW of storage.

As another option for solar, SMUD’s SolarShares® pilot program (the “SolarShares Pilot”) was established as a cost-effective and convenient way for commercial customers to meet their energy needs from solar power. The SolarShares Pilot offered SMUD commercial customers the opportunity to receive solar power without upfront costs or equipment installation through 5-, 10- or 20-year purchase contracts. Customers that entered into purchase contracts under the SolarShares Pilot receive up to half of their power from a utility-scale solar system. SMUD supplies solar power for the SolarShares Pilot either by building and maintaining utility-scale solar systems or by procuring solar power from third parties through power purchase agreements. The SolarShares Pilot generation was approximately 3.0% of retail sales in 2022. As of April 30, 2021, SMUD had completed the SolarShares Pilot and is not entering into new purchase contracts under the SolarShares Pilot.

Since January 2020, the California Building Code has required all newly constructed residential buildings under three stories to be powered by photovoltaic solar systems. A new home satisfies this requirement if it installs on-site solar or participates in an approved community solar or energy storage program. In February 2020, SMUD obtained approval from the California Energy Commission (“CEC”) to administer its own community solar program, called Neighborhood SolarShares® (“Neighborhood SolarShares”). SMUD’s Neighborhood SolarShares program can be used by developers of new low-rise residential buildings to satisfy the mandatory solar requirement. See also “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Rooftop Solar Mandate*.” Starting in 2023, the California Building Code’s mandatory solar requirement extends beyond low-rise residential properties, and other changes to the California Building Code’s community solar regulations took effect. SMUD revised its program to align with the new regulations and, in May 2023, obtained approval from the CEC to continue offering its Neighborhood SolarShares compliance option to newly constructed low rise residential homes in its service territory.

In addition to the SolarShares Pilot and Neighborhood SolarShares, SMUD maintains a voluntary green energy pricing program called Greenergy® (“Greenergy”). The Greenergy program allows customers the opportunity to pay an additional amount per month to ensure that either all or part of their electricity comes from green or carbon free energy sources. In 2022, the program allocated Renewable Energy Credits (“RECs”) equivalent to approximately 4.9% of retail sales to its participating customers.

Energy Efficiency. To further assist customers in managing energy usage and reducing regional carbon emissions and air pollution, SMUD offers an extensive array of energy efficiency and building electrification programs and services including financial incentives, loans, energy audits and education. In addition, SMUD has partnered with local developers to incorporate energy efficiency and all-electric construction measures into new residential and commercial construction, which helps developers plan and design efficient, cost-effective and low or zero-emission buildings. As part of SMUD’s 2019 Integrated

Resource Plan (“IRP”), SMUD set a goal for regional carbon emissions through transport and building electrification that aims to reduce carbon emissions in buildings and transport by 64% over the next 20 years. SMUD’s focus on electrification is continued in the Zero Carbon Plan (defined and discussed below). SMUD was the first electric utility in the country to set its efficiency goals based on carbon reductions, allowing building electrification and energy efficiency to both count toward meeting SMUD’s efficiency goals. This is a significant opportunity, as converting a typical home today to all-electric saves more than three times the carbon emissions compared to doing a major energy efficiency upgrade alone to the same building. See “POWER SUPPLY AND TRANSMISSION – Projected Resources.”

Sustainable Power Supply and Transmission

Maintaining a sustainable power supply entails focusing efforts on researching, promoting and implementing new renewable energy technologies and sources to meet SMUD’s long-term commitment to reducing carbon emissions and providing a reliable energy supply. SMUD defines a sustainable power supply as one that reduces SMUD’s GHG emissions to serve retail customer load to zero by 2030. See “– 2030 Zero Carbon Plan” below. SMUD is planning to achieve zero GHG emissions to serve retail customer load through investments in energy efficiency, clean distributed energy resources, renewables portfolio standard (“RPS”) eligible renewables, energy storage, large hydroelectric generation, clean and emissions free fuels, and new technologies and business models. Additionally, SMUD plans to continue pursuing GHG emissions reductions through vehicle, building and equipment electrification. At the same time, SMUD’s plans for maintaining a sustainable power supply include assuring the reliability of SMUD’s electric system, minimizing environmental impacts on land, habitat, water and air quality, and maintaining competitive rates relative to other electricity providers in the State.

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills regulate GHG emissions and encourage greater investment in energy efficiency and sustainable generation alternatives, principally through more stringent RPS. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings” herein.

2030 Zero Carbon Plan. In July 2020, the Board declared a climate emergency and adopted a resolution calling for SMUD to take significant and consequential actions to reduce its carbon footprint by 2030. On April 28, 2021, the Board approved SMUD’s 2030 Zero Carbon Plan (the “Zero Carbon Plan”). The Zero Carbon Plan is intended to be a flexible roadmap for SMUD to eliminate carbon emissions from its electricity production by 2030 while maintaining reliable and affordable service. To achieve these goals the Zero Carbon Plan is focused on four main areas: natural gas generation repurposing, proven clean technologies, new technologies and business models and financial impacts and options. SMUD plans to revisit the Zero Carbon Plan annually.

The natural gas generation repurposing focus of the Zero Carbon Plan calls for exploring the replacement of two of SMUD’s five Local Gas-Fired Plants (as defined herein) and the retooling of the other three Local Gas-Fired Plants. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Local Gas-Fired Plants.*” Based on SMUD’s studies to date, SMUD estimates that McClellan (as defined herein) and the Campbell Soup Project (as defined herein) can be replaced by mid-decade. Final decisions about the replacement of these two Local Gas-Fired Plants will be based on additional reliability studies and engagement with the community. As part of the Zero Carbon Plan, SMUD is also exploring converting the Carson Project (as defined herein) and the Procter & Gamble Project (as defined herein) to reliability use operations only and investigating the use of alternative fuels like Renewable Natural Gas-biomethane (RNG-biomethane), hydrogen and other biofuels for the Carson Project, the Procter & Gamble Project, and the Consumnes Power Plant (as defined herein). In addition, SMUD is investigating new technologies such as long duration energy storage, carbon capture and sequestration, hydrogen and other

clean fuel alternatives to help support natural gas repurposing. All final generator configurations are subject to reliability assessments.

The proven clean technologies focus of the Zero Carbon Plan calls for SMUD to procure approximately 1,100 to 1,500 MW of utility-scale solar photovoltaic (“PV”) generating capacity, 700 to 1,100 MW of local utility-scale battery storage, 300 to 500 MW of wind generating capacity, and 100 to 220 MW of geothermal generating capacity. The Zero Carbon Plan also estimates that customer installation of approximately 500 to 750 MW of behind-the-meter solar PV generating capacity and approximately 50 to 250 MW of behind-the-meter battery storage will assist SMUD with achieving the Zero Carbon Plan goals.

With respect to new technologies and business models, the Zero Carbon Plan focuses on evaluating, prioritizing and scaling the emerging technologies that SMUD expects will have the largest impact on reducing carbon in SMUD’s 2030 resource mix. SMUD is currently focused on various areas of technology and customer-focused programs, including electrification, education, demand flexibility, virtual power plants, vehicle-to-grid technology, and new grid-scale technologies. The Zero Carbon Plan forecasts that customer-owned resources and SMUD customer-focused programs will contribute between 360 and 1,300 MW of capacity to SMUD’s grid by 2030.

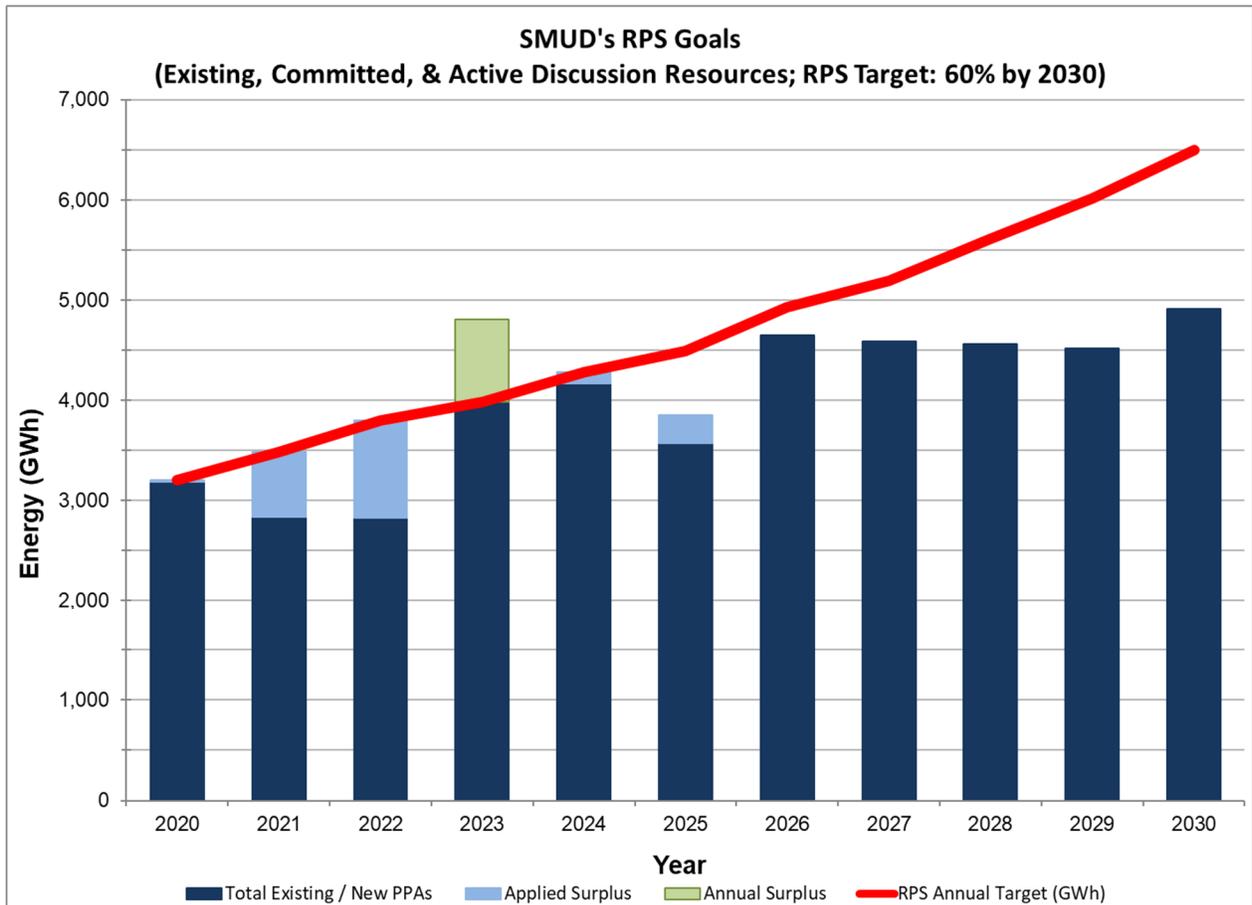
The financial impacts and options focus of the Zero Carbon Plan aims to keep SMUD rate increases at or below the rate of inflation while achieving SMUD’s goal of eliminating carbon emissions from its power supply by 2030. To pay for the expected costs of the Zero Carbon Plan and keep rate increases at or below the rate of inflation, the Zero Carbon Plan estimates the need for SMUD to realize between \$50 million and \$150 million of sustained annual savings. SMUD currently plans to achieve these sustained annual savings by exploring the implementation of operational savings strategies and pursuing partnership and grant opportunities.

While the ultimate impacts of the Zero Carbon Plan on SMUD’s financial results and operations are difficult to predict and are dependent on a variety of factors, such as the relative cost of procuring energy from clean technologies, the availability and relative cost of new technologies, and the adoption and implementation of energy efficiency and other measures by SMUD’s customers, such impacts could be material.

Renewable Energy and Climate Change. The California Renewable Energy Resources Act, established by Senate Bill X1-2 (“SBX1-2”) and the Clean Energy and Pollution Reduction Act of 2015, enacted by Senate Bill 350 (“SB 350”) require that SMUD meets 33% of its retail sales from RPS-eligible renewable resources by 2020 and 50% of its retail sales from RPS-eligible renewable resources by 2030. Senate Bill 100 (“SB 100”), passed by the legislature and approved by then-Governor Brown on September 10, 2018, accelerates the RPS targets and establishes a new 60% target by 2030. The bill also created a planning goal to meet all of the State’s retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Renewables Portfolio Standards*” for a discussion of the State RPS requirements.

SMUD’s compliance with State RPS requirements is evaluated over 3 or 4-year compliance periods. SMUD met the State RPS requirements for the first compliance period (2011-2013) and second compliance period (2014-2016). The third compliance period (2017-2020) required SMUD to source one-third of its energy from renewable resources, and SMUD had sufficient RECs to meet the third compliance period requirements. SMUD filed its 2020 and third compliance period RPS compliance report with the CEC in the second quarter of 2021 and is awaiting verification of its submission from the CEC which is expected to occur by the end of 2023. As of the end of the third compliance period (2020), SMUD had

approximately 1.0 million surplus RECs available to help meet future RPS targets. SMUD expects to file its 2022 RPS compliance report by July 1, 2023, and due to increased load compared to forecast in 2022, and a delayed commercial online date for the NTUA solar project, expects to have provided 34.1% of its retail sales from RPS-eligible renewable resources in 2022, which is less than the interim 2022 RPS target of 38.5%. However, RPS compliance is determined by compliance period and not by individual years and SMUD anticipates that it has sufficient surplus procured and/or under contract resources in 2023 and 2024 to offset the 2022 shortfall. Therefore, SMUD expects to be in compliance with the RPS requirements for the fourth compliance period (2021 – 2024). In addition to meeting RPS standards, SMUD serves an additional 7.3% of its customer load with renewable energy through its voluntary SolarShares and Greenergy pricing programs described above. SMUD estimates that it has sufficient renewable energy deliveries, new power supply contract commitments, new power supply commitments under active discussion, and RPS-eligible surplus carryover to meet its RPS requirements through 2024. Additional resources have been identified in solicitations currently under way that are expected to provide sufficient RPS-eligible resources to cover most of SMUD’s RPS requirements through 2030. Future solicitations are expected to provide the additional resources to fill any remaining gaps. The following chart illustrates SMUD’s current RPS requirements through 2030 and its existing and committed resources, and its resources under active discussion that are expected to be utilized to meet those requirements.



In addition to procuring new sources, meeting the RPS requirements will require replacement of certain existing renewable contracts which expire in future years. While SMUD anticipates it will meet much of its renewable resource requirements through purchase contracts with third parties, it continues to explore additional options, including wind, solar, biomass, and geothermal developments, partnering with other utilities on future projects, and local development options. SMUD's resource forecast (see "POWER SUPPLY AND TRANSMISSION – Projected Resources") accounts for future renewable resources as a component of "Uncommitted Purchases." To meet SMUD's Zero Carbon Plan goals, SMUD anticipates meeting loads in 2030 with approximately 70-80% renewable resources, in addition to hydro and other new zero carbon technologies. See "*– 2030 Zero Carbon Plan*" above.

Given the intermittent nature of power from renewable resources such as wind and solar, SMUD is exploring and investing in options that provide the flexibility to manage the intermittency of such renewable resources. Potential options include energy storage resources, which SMUD has committed to as part of the Zero Carbon Plan, and expanding load management resources. Additionally, on April 3, 2019, SMUD, through its membership in BANC, a joint exercise of powers agency formed in 2009, and currently comprised of SMUD, the Modesto Irrigation District ("MID"), the City of Roseville ("Roseville"), the City of Redding ("Redding"), the City of Shasta Lake and the Trinity Public Utilities District, has commenced its participation in the California Independent System Operator Corporation ("CAISO") western energy imbalance market ("WEIM"). Participation in the WEIM benefits SMUD by providing it with broader access to balancing resources within the region to help manage its expanding renewable portfolio. In addition, other entities within the BANC Balancing Authority Area began participation in the WEIM on March 25, 2021. See "BUSINESS STRATEGY – Serving SMUD's Customers – *Operational Independence and Local Control*" and "POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements."

In 2018, SMUD's Board adopted a new IRP through a comprehensive public process and filed the approved IRP with the CEC on April 29, 2019 pursuant to the CEC's IRP guidelines. The approved IRP calls for a reduction in GHG emissions from SMUD's energy supply by more than 60% by 2030 relative to 1990 levels and a goal of net zero emissions by 2040 due, in part, to a significant investment in electrification of the local building and transportation sectors. The IRP was expected to reduce Sacramento's economy-wide GHG emissions by 70% relative to current levels. SMUD's Zero Carbon Plan, adopted in 2021, built upon the IRP and set a goal of zero carbon emissions by 2030. On September 14, 2022, SMUD submitted an updated IRP filing with the CEC to incorporate the goals set in the Zero Carbon Plan pursuant to the CEC's IRP guidelines. See "BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *2030 Zero Carbon Plan*."

The State's carbon cap-and-trade market established pursuant to Assembly Bill 32 ("AB 32") began in 2013. See "DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Greenhouse Gas Emissions*" for a discussion of AB 32 and the State's cap-and-trade program. SMUD anticipates that allowances allocated to SMUD will nearly equal SMUD's compliance obligations under normal water year conditions. Under low water year conditions, SMUD may need to purchase additional allowances to cover its compliance obligations, including carbon obligations related to wholesale energy sales from SMUD's natural gas power plants. As SMUD implements its clean power goals, SMUD expects its need for these allowances to decline.

There is scientific consensus that increasing concentrations of GHG have caused and will continue to cause a rise in temperatures in the State and around the world. The change in the earth's average atmospheric temperature, generally referred to as "climate change," is, among other things, expected to result in a wide range of changes in climate patterns, including increases in the frequency and severity of extreme weather events, including droughts and heat waves, more frequent incidences of wildfires, changes in wind patterns, sea level rise and flooding, any of which alone or in combination could materially

adversely affect SMUD’s financial results or operations. See also “FACTORS AFFECTING THE REGION” and “OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Other Factors.” As described above, SMUD is actively working to meet its sustainable power supply goals, reduce its own GHG emissions, and assist the local governments in the territory it serves with their desired GHG reductions. In 2016, SMUD introduced the Pilot Natural Refrigerant Incentive Program, its first customer program providing incentives for GHG reduction in addition to kWh savings. SMUD is a founding member and active participant in the Capital Region Climate Readiness Collaborative, a public private partnership formed to better understand and plan for climate impacts expected in the region. SMUD is also an active member of the United States Department of Energy (the “DOE”) Partnership for Energy Sector Climate Resilience. SMUD regularly reviews scientific findings related to climate change and in 2016 published its Climate Readiness Assessment and Action Plan. In 2024, SMUD is planning to update the Climate Readiness Assessment and Action Plan along with other climate resiliency actions.

Energy Storage Systems. Assembly Bill 2514 (“AB 2514”) requires the Board to re-evaluate energy storage goals every three years. In compliance with AB 2514, the Board established a target of 9 MW of energy storage procurement by December 31, 2020, which SMUD has procured. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – *Energy Storage Systems*” for further discussion of AB 2514. In September 2020, the Board directed that energy storage forecasts be implemented through SMUD’s IRP process going forward. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*” above for a discussion of SMUD’s IRP. SMUD is also evaluating how to couple utility-scale solar with utility-scale storage to support future system reliability needs and renewable energy goals.

Meeting Peak Load. A significant consideration for SMUD will be how it addresses its system peak load. SMUD has implemented programs and tools, such as advanced metering, energy efficiency options, and TOD rates for residential customers, to help customers manage their costs while helping SMUD reduce its peak load. Analysis of 2021 data showed a reduction of approximately 115 MW, weather adjusted, for residential customers during the TOD peak period (5-8 p.m. local time). SMUD staff will continue to monitor the progress and results of the implementation of TOD rates and will use this information to inform future rate actions and load forecasts. See “BUSINESS STRATEGY – Serving SMUD’s Customers – *Time-of-Day Rates.*”

On September 16, 2021, the Board approved an optional residential Critical Peak Pricing rate (the “Peak Pricing Rate”), which went into effect June 1, 2022. The Peak Pricing Rate is designed to reduce load by increasing the price of energy when the grid is most impacted, up to 50 hours per summer. In exchange, customers on the rate will receive a per kWh discount on summer Off-Peak and Mid-Peak rates. SMUD is also exploring the use of more distributed energy resources and demand response programs that could further reduce SMUD’s system peak.

Operational Independence and Local Control. A key component of SMUD’s business strategy is focused on maintaining its independence in operating and maintaining its resources. As such, SMUD has taken a number of actions to mitigate the potential impacts of various federal and state regulatory actions. For example, in 2002 SMUD established itself as an independent control area (now termed “Balancing Authority”) within the Western Electricity Coordinating Council (“WECC”) region. By removing itself from CAISO’s Balancing Authority area, SMUD became responsible for balancing electric supply and demand within its own service territory. This move substantially reduced fees paid to CAISO, preserved operational flexibility and helped to insulate SMUD from the uncertain regulatory environment and tariff structure of CAISO. In addition to decreased financial risks, this independence also reduced SMUD’s exposure to the impacts of capacity and energy shortages in the CAISO Balancing Authority area. Further, as an independent Balancing Authority, SMUD continued to support the statewide electric grid in events of electrical emergencies requiring rotating outages, such as loss of major transmission lines or equipment,

as provided in the statewide emergency plan. By 2006, the SMUD Balancing Authority footprint expanded north to the California-Oregon border and south to Modesto, to include the service areas of the WAPA, MID, Redding and Roseville, and TANC -owned 340-mile 500-kV California-Oregon Transmission Project (“COTP”). In October 2009, SMUD, with the coordination and cooperation of WAPA, joined the Western Power Pool Reserve Sharing Group, which supports reliability and reduces operating costs. In May 2011, BANC assumed the role of the Balancing Authority, though SMUD continues to oversee operation of the grid on behalf of BANC. BANC members share cost responsibility for balancing authority-related compliance obligations, liabilities, and operations. BANC also serves as an important venue for SMUD and other BANC members to collaborate with respect to operational and market improvements inside the BANC footprint and to preserve their operational independence. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.” On April 3, 2019, SMUD, through its participation in BANC, began operating in the CAISO WEIM, which helps SMUD better manage the integration of renewable energy resources. The CAISO WEIM is a voluntary market, which allows SMUD to maintain its operational independence from the CAISO, while providing SMUD greater access to balancing resources throughout the western region. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.”

FERC Order 1000. In 2011, the Federal Energy Regulatory Commission (“FERC”) issued Order 1000, which mandates regional transmission planning and imposes a regional cost allocation methodology for transmission facilities. FERC states that it has the authority to allocate costs to beneficiaries of transmission services even in the absence of a contractual relationship between the owner of the transmission facilities and the beneficiary. Despite appeals challenging FERC’s authority on a number of grounds, the D.C. Circuit Court of Appeals upheld Order 1000. See “DEVELOPMENTS IN THE ENERGY MARKETS – Federal Legislation and Regulatory Proceedings – *Federal Regulation of Transmission Access.*” Nevertheless, there remains flexibility with respect to SMUD’s participation in regional transmission planning. Specifically, SMUD is voluntarily participating as a Coordinating Transmission Owner (“CTO”) in the WestConnect transmission planning organization, and will rely on its WestConnect membership to keep it Order 1000 compliant. While SMUD opposes any cost allocation methodology that would obligate SMUD to pay for facilities that it does not use or need to maintain reliable operations or serve its load, the FERC-approved WestConnect planning process does provide a CTO the option to not accept an allocation of costs. WestConnect is composed of utility companies providing transmission of electricity in a portion of the western United States, working collaboratively to assess stakeholder and market needs and develop cost-effective enhancements to the western wholesale electricity market. SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD’s electric system or the electric industry generally.

Electricity, Natural Gas, and Related Hedging

SMUD continues to utilize a comprehensive and integrated power and fuel supply strategy to acquire a reliable and diversified portfolio of resources to meet existing and future needs. This strategy includes a combination of both physical supply and financial hedging transactions to reduce price risk exposure over a five-year horizon. SMUD’s physical supply arrangements include ownership of power generating resources, as well as a diversified portfolio of power and fuel supply purchase contracts that range in duration, with a mixture of fixed and variable pricing terms.

With regard to the power purchase contracts, SMUD has entered into a series of contracts for the purchase of electricity to supply the portion of its resource needs not already provided by owned resources. SMUD also actively manages its exposure on variable rate electricity purchases, and at times may enter into financial contracts to fix prices by using options to reduce price risk, in each case when warranted by economic conditions. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements.”

With regard to fuel supply contracts, SMUD utilizes a similar strategy of employing financial contracts of various durations to hedge its variable rate fuel supply contracts. As of March 31, 2023, these contracts are forecasted to have hedged the price exposure on approximately 83%, 66% and 55% of SMUD’s anticipated natural gas requirements for 2023, 2024 and 2025, respectively. While the financial effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted. See “POWER SUPPLY AND TRANSMISSION – Fuel Supply – *Supply*.”

As provided in SMUD’s natural gas contracts, SMUD may be required to post collateral to various counterparties. As of March 28, 2023, SMUD did not have any collateral posting obligations. A decrease in natural gas prices could result in a collateral posting by SMUD. While the posting of collateral is not an expense for SMUD, it does temporarily encumber unrestricted cash balances.

To hedge against hydroelectric production volatility of SMUD-owned hydroelectric facilities, SMUD implemented a pass-through rate component called the Hydro Generation Adjustment (the “HGA”). The HGA and the associated Hydro Rate Stabilization Fund (the “HRSF”) help to offset increased power supply or fuel supply costs in years where precipitation levels at SMUD-owned hydroelectric facilities are low. To hedge against variations in the volume of energy received from non-SMUD-owned hydroelectric resources, SMUD uses a rate stabilization fund to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

Managing Risks

SMUD maintains an Enterprise Risk Management (“ERM”) program, a strategic approach to managing enterprise-wide risks as a portfolio, to help reduce the chance of loss, create greater financial stability and protect SMUD resources. It is designed to maintain an early warning system to monitor changes in, and the emergence of, risks that affect the organization’s business objectives. Under the purview of the Enterprise Risk Oversight Committee, composed of executive members and chaired by the Chief Financial Officer, ERM conducts ongoing risk identification, assessments, monitoring, mitigation, risk-based budgeting and reporting. To ensure accountability and oversight, each identified risk is assigned to an executive-level risk owner. Risk status and mitigation efforts are reported monthly to the Board.

Competitive Challenges

In the coming decade, utilities like SMUD may face competition from companies in other industries looking to diversify into the energy sector. Examples of developing competitive areas include retail sale of electricity, distributed electric storage resources, renewable distributed generation (mostly solar in Sacramento), customer installation of fuel cells, third-party electric vehicle charging, home or business automation that enables greater customer participation in energy markets, and third-party provision of energy management software and solutions.

SMUD has a wide range of initiatives to monitor and adapt to changing market conditions and new industry participants. Key areas of focus include:

- Enhancing customer experience. Recognizing the importance of meeting customer expectations, SMUD introduced the Customer Experience Strategy in 2016 to provide customers “value for what they pay” and further strengthen customer loyalty. The initiative is focused on ensuring SMUD has the people, systems, technology, programs and services to consistently meet or exceed customers’ changing expectations. The customer experience is measured via surveys with the goal of achieving 80% of customers agreeing that SMUD provides them with value for what they pay by 2030.

- Restructuring electric rates. In 2017, the Board approved TOD rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018, and the full transition was completed in the fourth quarter of 2019. All of SMUD’s business customers are also on time-based rates. In 2019, the Board approved a restructuring of commercial rates to collect a greater portion of fixed costs through fixed charges and to better align time periods and prices with energy markets. The commercial rate restructuring was delayed by one year due to the impacts of the COVID-19 pandemic. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges” and “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”
- Ongoing integrated resource planning. SMUD monitors and updates its integrated resource planning to ensure future sources of energy balance cost, reliability and environmental requirements with the flexibility to meet challenges of changing market and regulatory conditions, customer energy resources, and emerging technologies.

Leveraging Core Competencies

In addition to these initiatives, SMUD is leveraging core competencies to improve industry safety and help communities serve their customers’ energy needs.

Sacramento Power Academy. SMUD is leveraging its significant experience in training skilled line-workers with the opening of the SMUD Power Academy regional training center in 2016. The academy currently emphasizes training for public power, customer-owned utility employees. There are currently approximately 2,000 customer-owned utilities in the United States that are similar to SMUD, many of which may not have the resources to adequately train their employees. In addition to line-workers, the center will also train substation and network electricians. Other future plans include training electrical, telecom and meter technicians; engineers and designers; construction management inspectors; equipment operators; cable splicers and locators; and support staff.

Community Energy Services. In 2002, Assembly Bill 117 was passed to establish Community Choice Aggregation in the State by authorizing Community Choice Aggregators (“CCAs”) to aggregate customer electric load and purchase electricity for customers. SMUD’s Community Energy Services department was established in 2017 to support organizations with values closely aligned with SMUD’s values, while also generating additional revenue for SMUD. CCA programs are proliferating in the State thanks to support for expanding renewable energy use and desire for local control particularly for electricity procurement. There are numerous CCAs operating in the State, and more are anticipated to launch in the future. CCAs are responsible for procuring wholesale power, setting the generation rate, and staffing a call center to handle opt-outs and questions about the power portfolio. The local investor-owned utility (“IOU”) continues to deliver electricity from the electric grid, maintain its electric infrastructure, bill customers and collect payments.

In October 2017, SMUD was selected by the governing board of Valley Clean Energy (“VCE”) to provide technical, energy and support services, including data management and call center services, wholesale energy services, and business operations support, to VCE for a five-year term [expiring May 31, 2023. SMUD and VCE are currently negotiating a new contract.] VCE is a joint powers agency formed in 2016 by the City of Woodland, the City of Davis and Yolo County to implement a local CCA program. The service territory expanded to include the City of Winters in 2021. The mission of VCE is to deliver cost-competitive clean electricity, product choice, price stability, energy efficiency, and greenhouse gas emissions reductions to its customers in Yolo County. VCE began electric services to its customers in the summer of 2018, giving Yolo County residents a choice between two electricity providers, VCE and PG&E.

In November 2017, SMUD was selected by the governing board of East Bay Community Energy (“EBCE”) to provide call center and data management services for a three-year term beginning in January 2018. SMUD signed a new contract with EBCE in January 2022 for call center and data management services for an additional three-year term. EBCE is a joint powers agency formed in 2016 by the cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, Piedmont, San Leandro and Union City in Alameda County to implement a local CCA program. EBCE expanded its territory to the cities of Pleasanton, Newark, and Tracy in April 2021.

In June 2019, SMUD was selected by the governing board of Silicon Valley Clean Energy (“SVCE”) to provide program services to help local SVCE communities reduce carbon pollution while delivering engaging customer experiences. SVCE programs are focused on grid integration, as well as electrifying transportation, buildings and homes. SVCE is a joint powers agency formed in 2016 by the cities of Campbell, Cupertino, Gilroy, Lost Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County to implement a local CCA program.

In July 2022, SMUD was selected by the governing board of Marin Clean Energy (“MCE”) to provide data management, billing, data analytic and system assessment services to MCE. MCE is a joint powers agency formed in 2010 and represents 37 member communities across four Bay Area counties: Contra Costa, Marin, Napa and Solano.

In September 2022, SMUD was selected by the governing board of Sonoma Clean Power (“SCP”) to provide market research services to SCP. SCP is a joint powers agency that serves Sonoma and Mendocino counties.

While CCAs have had success in the State, they are susceptible to business, regulatory and other risks that could lead to a financial loss and/or result in a cessation of operations for the CCA. These risks could extend to a CCA’s counterparties, including SMUD. SMUD has made an effort to identify and mitigate potential counterparty risks to the extent possible in service agreements with the CCAs described above. SMUD may pursue opportunities to provide similar services to additional CCAs in the future. SMUD management does not expect its current arrangements to have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

FACTORS AFFECTING THE REGION

Precipitation Variability

SMUD uses a National Weather Service precipitation station located at Pacific House, California to approximate available water supply to SMUD’s Upper American River Project (the “UARP”) hydropower reservoirs. As of March 31, 2023, precipitation at Pacific House, California totaled 77 inches for the October-September hydropower water supply period. This is 185% of the 50-year rolling median of 42 inches. Total reservoir storage in the UARP hydropower reservoirs was 269 [TAF] as of April 18, 2023, which was about 71% of capacity, approximately 8% below the historical average for this date to accommodate snowpack which was 156% of normal. SMUD manages its reservoirs to maximize water storage going into the summer season, which preserves generating capacity during SMUD’s high load months and ensures that SMUD meets its UARP FERC license requirements, including requirements for recreational and environmental flows.

There can be wide swings in precipitation from year to year. In years with below average rainfall, SMUD may have to generate or purchase replacement energy at additional cost. To hedge against variations in the volume of energy received from SMUD-owned UARP hydroelectric resources, SMUD uses the

HRSF to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

SMUD is also exposed to precipitation variability through its contract with the WAPA. In an average water year this contract provides roughly 661 gigawatt hours (“GWh”) of power. WAPA’s actual deliveries are based on hydroelectric generation (minus energy use for pumping) at Central Valley Project reservoirs in Northern California, which varies based on annual precipitation patterns, water deliveries for agriculture, and flow requirements in the Sacramento-San Joaquin River Delta. Unlike the UARP, SMUD does not monitor precipitation stations to approximate power deliveries under the WAPA contract, and instead relies on a forecast of power deliveries from WAPA. As of March 31, 2023, WAPA has forecasted power deliveries of 451 GWh for 2023, down approximately 32% less than an average water year. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – *Western Area Power Administration*.”

Wildfires

General. Wildfires in the State have become increasingly common and destructive. Frequent drought conditions and unseasonably warm temperatures have increased, and could further increase, the possibility of wildfires occurring in areas where SMUD maintains generation, transmission and distribution facilities. The number of diseased and dead trees has increased, and could further increase, this possibility. As a result, SMUD faces an increased risk that it may be required to pay for wildfire related property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits), or may be disputed by insurers, and could be material. In addition, a significant fire or fires in SMUD’s generation, transmission or service area could result in damage or destruction to SMUD’s facilities, result in a temporary or permanent loss of customers or otherwise materially increase SMUD’s costs or materially adversely affect SMUD’s ability to operate its Electric System or generate revenues.

SMUD’s service territory is located within Sacramento County, which is located outside the California Public Utilities Commission (the “CPUC”) high fire threat areas established in 2018. However, as described below, SMUD’s UARP facilities and certain of SMUD’s and TANC’s transmission facilities are within CPUC high fire threat areas. In addition, as described below, certain portions of SMUD’s service territory are located within the California Department of Forestry and Fire Protection (“Cal Fire”) Fire Protection and Resource Assessment Program (“FRAP”) Moderate, High and Very High Fire Hazard Severity Zones. SMUD’s exposure to liability for damages related to its UARP facilities, which are located within high fire threat areas in El Dorado County, is reduced due to risk mitigation measures adopted by SMUD and the low number of inhabitants and structures near the UARP facilities (See “Wildfire Mitigation” below). SMUD continues to take responsible action to minimize its exposure to liability from wildfires; however, under current State law, utilities can be held liable for damages caused by wildfires sparked by their equipment or other facilities regardless of whether the utility was negligent or otherwise at fault. Therefore, at this time the full extent of SMUD’s potential exposure to wildfire risk is unknown.

Distribution (SMUD Service Territory). State law requires Cal Fire to classify areas in the State based on the severity of the fire hazard that is expected to prevail there. These areas or “Fire Hazard Severity Zones” are based on factors such as fuel (material that can burn), slope and the expected chance of burning. There are three Fire Hazard Severity Zones (Moderate, High and Very High) based on increasing fire hazard. Portions of SMUD’s service territory are located within these Fire Hazard Severity Zones. SMUD has assessed its service territory based on Cal Fire’s FRAP map, adopted in 2007; the following table illustrates SMUD’s assessment of the approximate extent of its service territory and retail customer base located within the three Fire Hazard Severity Zones.

Fire Hazard Severity Zone	Moderate	High	Very High
Acres of SMUD Service Area	231,816	2,337	1,061
% of Total SMUD Service Area	40.6%	0.4%	0.2%
Number of Retail Customers	53,621	4,285	148
% of Total Retail Customers	7.7%	0.6%	0.0%

Transmission (Outside of SMUD Service Territory). In 2018, the CPUC approved a new statewide fire map that identifies areas of elevated and extreme wildfire risk from utility-associated assets located throughout the State. SMUD directly participated in the development of the CPUC’s statewide fire map. In connection with the development of the CPUC’s statewide fire map, a peer review and a team of independent nationwide experts led by Cal Fire affirmed that SMUD’s electric service area is properly located outside of these elevated (“Tier 2”) and extreme (“Tier 3”) high fire threat areas; however, SMUD’s UARP facilities are located within both Tier 2 and Tier 3 areas. According to the CPUC, Tier 2 fire-threat areas are areas where there is an elevated wildfire risk from utility assets and Tier 3 fire-threat areas are areas where there is an extreme risk from utility assets. As of June 8, 2021, approximately 37 right-of-way miles of SMUD’s transmission lines are in Tier 2 fire-threat areas and approximately 19 right-of-way miles of SMUD’s transmission lines are in Tier 3 fire-threat areas. SMUD is also a member of TANC. As of July 2022, approximately 116.3 right-of-way miles of TANC’s transmission lines are in Tier 2 fire-threat areas and approximately 4.5 right-of-way miles of TANC’s transmission lines are in Tier 3 fire-threat areas. In accordance with its FERC license, SMUD adheres to a FERC-approved Fire Prevention and Response Plan for its UARP facilities. On May 17, 2018, in accordance with State law, SMUD’s Board of Directors determined that the UARP area may have a “significant risk of catastrophic wildfire” resulting from overhead electric facilities and that SMUD’s FERC-approved UARP Fire Prevention and Response Plan meets requirements for presenting wildfire mitigation measures to the Board for its approval.

Wildfire Mitigation. In response to potential wildfire risk, SMUD has implemented and is continuing to implement a series of measures intended to prevent wildfires from occurring, minimize the spread of any fire that does occur and improve the resiliency of its system. These measures include an increase in the degree of sophistication of fuel reduction inside and adjacent to rights-of-ways; installation of Cal Fire-approved exempt material to reduce the risk of sparking; enhanced inspection and maintenance programs; increased use of ignition-resistant construction, including covered conductors and undergrounding of conductors; increased monitoring of and identified responses to fire conditions, including operational procedures for the de-energization of lines during high fire conditions; and elimination of automatic reclosers on SMUD’s transmission lines and on SMUD’s distribution lines in certain areas during fire season.

SMUD’s proactive approach to vegetation management recently has been expanded to include the use of advanced technologies such as Light Detection and Ranging (“LIDAR”) surveys, ortho and oblique that is used to pinpoint tree health and/or condition that may not yet be visible to the naked eye. In addition, SMUD has installed additional weather stations in transmission corridors and substations for increased situational awareness and has continued coordination and collaboration with local agencies and first responders as well as vulnerable populations.

State legislation enacted in 2018 and 2019 (SB 901 and AB 1054, respectively) requires publicly owned utilities (“POUs”) to prepare and present Wildfire Mitigation Plans to their governing boards by January 1, 2020, and annually thereafter. SMUD assembled an enterprise-wide team of subject-matter experts to prepare its plan in compliance with this legislation. SMUD’s initial Wildfire Mitigation Plan (“WMP”) was adopted by the Board in the fourth quarter of 2019, after circulation for public comment and

review of the comprehensiveness of the plan by a qualified independent evaluator. The WMP and evaluator's report were submitted to the State Wildfire Safety Advisory Board (the "WSAB") in 2020. The WSAB was established pursuant to AB 1054 and is charged, among other things, with providing comments and advisory opinions relating to content and sufficiency of POU wildfire mitigation plans and recommendations on how to mitigate wildfire risk.

SMUD reviews its WMP each year, presenting the updated plan to the Board for adoption at duly noticed public meetings. The updated plans and evaluator reports are submitted to the WSAB for advisory opinion and recommendations. SMUD responds to the WSAB's comments regarding SMUD's Wildfire Mitigation Plan as part of its WMP process. SMUD will continue to annually review and update its WMP, conducting a comprehensive review at least every third year.

[SMUD is currently conducting a comprehensive review and update of its WMP and anticipates presenting its 2023-2025 WMP to the Board in second quarter of 2023, after soliciting public input and independent evaluation.]

Wildfire Insurance. Wildfires in the State have not only increased potential liability for utilities, but have also adversely impacted the insurance markets, leading to higher costs for coverage; coverages becoming prohibitively expensive; limited or restricted coverage to certain types of risks; or coverage at insufficient levels. SMUD most recently renewed its general and wildfire liability insurance coverage on June 15, 2022. SMUD increased the commercially-insured portion of its \$255 million wildfire coverage program from \$176 million to \$192.5 million and reduced the self-insured layers and quota share portions of the insurance tower down to \$62.5 million.

In addition, it is expected that SMUD will have a portion of the \$400 million aggregate principal amount of its commercial paper and line of credit program to provide operational flexibility in the event of the occurrence of a wildfire or other operational event. However, SMUD has not covenanted to maintain the availability of the commercial paper program and line of credit program for these purposes and no assurances can be given that the commercial paper and line of credit program will be available at the time of, or during, such an event.

August 2020 Heat Wave

The State experienced a period of prolonged above average temperatures from August 14, 2020 through August 18, 2020. The CAISO was forced to institute rotating electricity outages in the State during this extreme heat wave. SMUD, as a member of BANC, did not have to implement any planned power disruptions. Additionally, SMUD was able to support the CAISO during some hours of the heat wave with both requested emergency assistance and wholesale market sales. SMUD's peak demand between August 14, 2020 and August 18, 2020, varied between 2,874 MW and 3,057 MW, well below SMUD's record peak of 3,299 MW.

September 2022 Heat Wave

The State experienced a period of prolonged above average temperatures from September 5, 2022 through September 8, 2022. On September 6, 2022, SMUD experienced its second highest peak demand of 3,292 MW. SMUD did not have to implement any planned power disruptions.

Storm Damage

In January 2023, SMUD experienced a series of winter storms that brought heavy rains and high winds causing damage to SMUD's grid and widespread outages for SMUD's customers. By the time the

storm response was complete, SMUD had experienced the largest mobilization of personnel and restoration crews in its history. SMUD incurred costs related to removing downed trees, restoring power from downed poles and broken lines, replenishing inventory, communicating with and providing assistance to customers, maintaining IT systems, and coordinating with local emergency agencies. SMUD is pursuing claims with Federal and State agencies. SMUD currently cannot predict financial impacts from the storm damage however such impacts may be material.

Cosumnes Power Plant Outage

On June 5, 2022, the Cosumnes Power Plant was shut down due to a ground fault in the Steam Turbine Generator (“STG”) stator. The ground fault was caused by delamination of insulation of the through bolt. Damage from the ground fault resulted in a rewind and restack of the stator core, replacement of all stator through bolts, and a full rewind of turbine rotor. The Cosumnes Power Plant repairs were completed in February 2023 and the plant returned to service on March 5, 2023. During the extended outage, SMUD shifted generation to the other Local Gas-Fired Plants and the Sutter Energy Center and procured additional energy and resource adequacy capacity. SMUD also requested and received approval from the California Air Quality Board and California Energy Commission to operate one or both of the gas turbines without the STG. During the September 2022 heatwave, both of the gas turbines at the Cosumnes Power Plant were operated without the STG, providing 270 MW at peak.

To mitigate the financial impact of unplanned outages from its thermal assets, SMUD carries commercial property insurance with a business interruption endorsement that can provide up to \$30.8 million of claims recovery per month, with a sub-limit of \$310 million over any 18-month period. Business interruption claims are subject to a 60-day waiting period. SMUD has begun the property damage and business interruption insurance claim process and received a \$50 million advance in December 2022. SMUD is reviewing and submitting claim expenses and expects to reach claim settlement in the third quarter of 2023. The settlement amount is unknown but is expected to be material.

Impacts from COVID-19 Pandemic

While the impact of the COVID-19 pandemic on SMUD has lessened since the height of the pandemic in 2020, SMUD is still experiencing impacts from the pandemic. Compared to weather adjusted load levels, SMUD’s overall load is near or above pre-pandemic levels. Compared to pre-pandemic loads, residential customer load remains higher and commercial customer load has almost recovered. SMUD anticipates that commercial customer load recovery will continue over the next couple of years resulting in continued movement towards pre-pandemic levels, but not a complete recovery as people continue to work from home long-term.

Part of the governmental response to the economic consequences of the pandemic required utility providers (including SMUD) to provide additional grace periods and flexible payment plans for the payment of utility bills or to refrain from pursuing collection remedies for unpaid bills for a period of time. SMUD also implemented a no-shutoff policy through January 2022 under which SMUD did not disconnect power to a customer for non-payment of its electric bill. Beginning in February 2022, SMUD resumed its normal payment, late fee, and disconnection process and began disconnections of unpaid accounts in late April 2022. As a result, SMUD has experienced an increase in delinquencies for customer electric accounts versus pre-pandemic levels. In December 2021, SMUD received \$41 million from the California Arrearage Payment Program (“CAPP”) initial funding, and an additional \$9.9 million in 2022. All funds were applied to delinquent balances. As of March 31, 2023, the total delinquencies for customer electric accounts were \$50.8 million, after the CAPP credit, which is an increase from the February 2020 balance of total delinquencies for customer electric accounts of \$16.9 million.

SMUD also paused the recertification process for existing customers in SMUD’s low-income discount program during the pandemic. The number of customers participating in the low-income assistance program increased by 19,775, or approximately 26% from February 2020 to February 2023. SMUD has resumed the recertification process for existing customers in the low-income discount program in 2023.

While the impacts of the COVID-19 pandemic on SMUD have lessened, if the pandemic and its consequences again become more severe or another similar event occurs, the impacts on SMUD’s financial results and operations could be material.

RATES AND CUSTOMER BASE

Rates and Charges

SMUD’s Board of Directors has autonomous authority to establish the rates charged for all SMUD services. Unlike IOUs and some other municipal utility systems, retail rate and revenue levels are not subject to review or regulation by any other federal, State or local governmental agencies. Changes to SMUD rates only require formal action by the Board of Directors after two public workshops and a public hearing. SMUD is not required by law to transfer any portion of its collections from customers to any local government. SMUD typically reviews and sets rates on a two-year cycle.

2019 Rate Action.

On June 24, 2019, the Board approved a 3.75% rate increase effective January 1, 2020, a 3.00% rate increase effective October 1, 2020, a 2.50% rate increase effective January 1, 2021, and a 2.00% rate increase effective October 1, 2021, for all customer classes. Additionally, the Board approved a restructuring of the commercial rates, including new time periods and an overall increase in the fixed bill components, such as the System Infrastructure Fixed Charge and demand charges, and a corresponding decrease in energy charges, making the restructuring revenue neutral by rate category. To minimize bill impacts, rate categories will be restructured over an 8-year period. Due to the impacts of the COVID-19 pandemic on SMUD’s operations and priorities, on August 20, 2020, the Board approved postponing the implementation of the commercial rate restructure for one year. Customers were transitioned to the new rates in the first quarter of 2022. There is currently pending litigation concerning the adoption of the 2020 and 2021 rates. See “LEGAL PROCEEDINGS – Proposition 26 Lawsuit.”

2021 Rate Action.

On September 16, 2021, the Board approved a 1.5% rate increase effective March 1, 2022 and a 2.0% rate increase effective January 1, 2023 for all customer classes. Additionally, the Board approved the Solar and Storage Rate, the optional residential Peak Pricing Rate, and updates to certain schedules of SMUD’s Open Access Transmission Tariff (“OATT”). The Board also approved a new timeline for the commercial rate restructure transition, and all impacted commercial customers were transitioned to the new rates by the end of the first quarter of 2022.

SMUD also implemented a solar interconnection fee based on the size of solar interconnection and supporting programs such as battery incentives, incentives to enroll in SMUD’s Peak Pricing Rate, battery incentives for Virtual Power Plants, and a program to bring the benefits of solar to under-resourced multi-family communities. These programs and fees are not subject to Board approval.

Rate Stabilization Funds

The Rate Stabilization Fund (the “RSF”) is maintained by SMUD to reduce the need for future rate increases when costs exceed existing rates. At the direction of the Board, amounts may be either transferred into the RSF (which reduces revenues) or transferred out of the RSF (which increases revenues). The Board authorizes RSF transfers on an event driven basis. The RSF includes funds to hedge variations in the volume of energy received from WAPA hydroelectric generation, variation in AB 32 revenue and variations in Low Carbon Fuel Credit (“LCFS”) revenue. As of April, 2023, the balance in the RSF was \$120.1 million, which is approximately 7.3% of annual retail revenue.

Effective July 2008, SMUD implemented the HGA, which is a pass-through rate component to deal with variations in hydroelectric generation from the UARP (see “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Hydroelectric*”). The HGA is designed to increase revenues in dry years when SMUD must buy power to replace hydroelectric generation and return money to the HRSF in wet years when SMUD has more hydroelectric generation than expected. Each year SMUD determines the impact of precipitation variances on projected hydroelectric generation from the UARP. When the precipitation variance results in a deficiency of hydroelectric generation from the UARP, transfers from the HRSF, which was created as a component of the RSF, to SMUD’s available cash, will be made in an amount approximating the cost to SMUD of replacement power (up to 4% of revenues) until the balance in the HRSF is zero. When the precipitation variance results in a projected surplus of hydroelectric generation from the UARP, deposits will be made into the HRSF in an amount approximating the positive impact to SMUD from the surplus hydroelectric generation (up to 4% of revenues) until the balance in the HRSF is equal to 6% of budgeted retail revenue. If the balance in the HRSF is not sufficient to cover transfers that would otherwise be made in the event of a projected deficiency in UARP hydroelectric generation, a 12-month HGA surcharge will automatically be included on customers’ electric bills at a level that generates up to 4% of retail revenue. If the balance in the HRSF is equal to 6% of budgeted retail revenue on any precipitation variance calculation date and the precipitation variance results in a projected UARP hydroelectric generation surplus, the positive impact of the surplus may be used for other purposes at staff’s recommendation, with the approval of the Board, including returned to customers through an electric bill discount up to 4% of retail revenue. SMUD calculates HRSF transfers based on an April-March (water year) precipitation period at Pacific House, California. This National Weather Service precipitation station is used to approximate available water supply to SMUD’s UARP hydropower reservoirs. As of March 31, 2023, precipitation at Pacific House, California totaled 90.83 inches which is above the 50-year rolling median of 50.52 inches.

As of April, 2023, the balance in the RSF and HRSF combined was \$216.5 million. SMUD transferred approximately \$65.4 million into of the HRSF from SMUD’s available cash in April 2023 due to above average precipitation, which increased the balance in the HRSF from \$31 million to approximately \$96.4 million. Although the HRSF and the subaccount of the RSF that hedge variations in the volume of energy received from non-SMUD hydroelectric generation currently have positive balances, below average precipitation could deplete the HRSF and RSF balances to zero.

Low Income Discount

As of February 2023, approximately 95,175 customers received the low-income discount offered by SMUD, which represents approximately 17% of all residential customers. SMUD suspended recertification during the pandemic, but continued to monitor the program to ensure participants continue to be eligible for the discount. In 2022, the total discount was approximately \$31.3 million. As a result of the effects of the COVID-19 pandemic and related economic downturn, SMUD experienced an increase in low-income discount applicants. See “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”

SMUD expanded its programs and services starting in 2016 to help customers with energy assistance, home improvement packages and education. SMUD is creating tailored solutions to best meet the needs of low-income customers. These solutions include free solar panels and inspecting homes to identify energy saving and fuel switching opportunities. As of February 2023, SMUD has performed 27,000 energy retrofits and, in partnership with Grid Alternatives (a non-profit organization that focuses on implementing solar power and energy efficiency for low-income families), 196 customers have benefited from free solar installations. Forty-eight additional homes received solar and energy efficiency through a partnership with Habitat for Humanity of Greater Sacramento. As part of SMUD's Zero Carbon Plan and the focus on building electrification, SMUD has also been ramping up electrification investments for low-income customers. Since 2019, SMUD has assisted more than 1,000 households with electrification upgrades.

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Rate Comparisons

SMUD’s rates remain significantly below those of PG&E and other large utilities throughout the State. The following table sets forth the average charges per kWh by customer class for both SMUD and PG&E. PG&E’s rates reflect their recently approved rate increase effective March 1, 2023.

AVERAGE CLASS RATES

	SMUD Rates (cents/kWh)⁽¹⁾	PG&E Rates (cents/kWh)⁽²⁾	Percent SMUD is Below PG&E⁽³⁾
Residential – Standard	17.96¢	36.27¢	50.5%
Residential – Low Income	12.53¢	23.11¢	45.7%
All Residential	17.10¢	30.50¢	44.0%
Small Commercial (Less than 20 kW)	17.39¢	34.55¢	49.7%
Small Commercial (21 to 299 kW)	16.07¢	33.90¢	52.6%
Medium Commercial (300 to 499 kW)	15.01¢	32.39¢	53.6%
Medium Commercial (500 to 999 kW)	14.08¢	28.00¢	49.7%
Large Commercial (Greater than 1,000 kW)	12.03¢	22.12¢	45.6%
Lighting – Traffic Signals	13.77¢	33.94¢	59.4%
Lighting – Street Lighting	15.64¢	46.15¢	66.1%
Agriculture	15.25¢	31.49¢	51.6%
System Average	15.65¢	29.83¢	47.6%

⁽¹⁾ Projected 2023 average prices for SMUD with rates effective January 1, 2023.

⁽²⁾ PG&E average prices in 2023 reflect rates effective March 1, 2023, per Advice Letter 6863-E- dated February 15, 2023.

⁽³⁾ The rates in the Average Class Rates table are calculated by dividing the total revenue of each class by the total usage of that class in kWh. The actual savings per customer will vary based on their electricity consumption.

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The following table shows a comparison of SMUD’s charges for the average residential usage of 750 kWh per month (based on an average of summer and non-summer) and charges of seven similar neighboring or largest utilities in the State.

STATEWIDE COMPARISON–RESIDENTIAL SERVICE

	Monthly Billing Charge 750 kWh⁽¹⁾⁽²⁾	Percent SMUD is (Below)/Above Utility
Sacramento Municipal Utility District	\$131.40	
Pacific Gas & Electric Company	\$282.25	(53%)
Roseville Electric Utility	\$122.47	7%
Turlock Irrigation District	\$123.70	6%
Modesto Irrigation District	\$144.30	(9%)
Los Angeles Dept. of Water & Power	\$169.76	(23%)
Southern California Edison Company	\$273.21	(52%)
San Diego Gas and Electric Company	\$357.12	(63%)

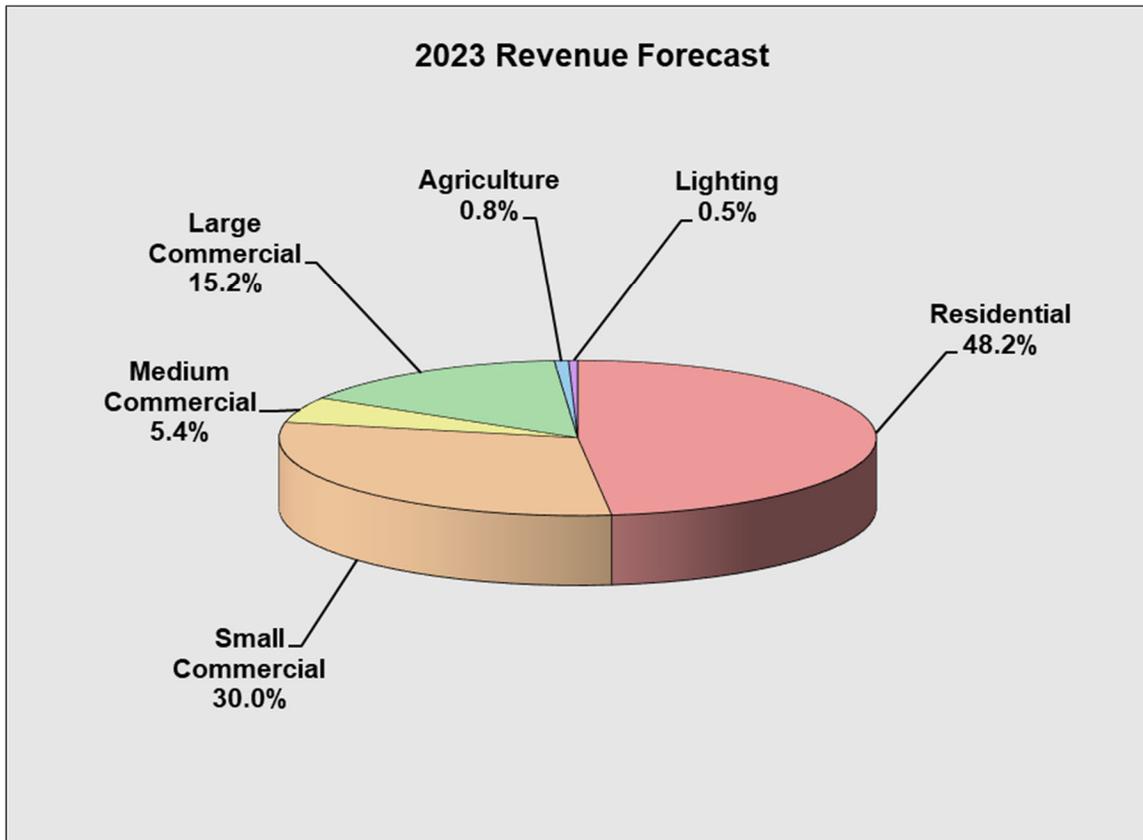
⁽¹⁾ Per individual utility’s published schedules as of March 1, 2023.

⁽²⁾ Average usage of theoretical customer using 750kWh per month.

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Allocation of Revenue by Customer Class

The following chart sets forth the forecast percentage of SMUD revenues from billed sales associated with each customer class.



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Customer Base; Largest Customers

A stabilizing influence on SMUD's revenues is that a substantial proportion is derived from residential customers (48.9% in 2022). Historically, revenue from commercial and industrial consumption has been more sensitive to economic fluctuation. Furthermore, SMUD has no dominant customers that account for a significant percentage of annual revenues. In 2022, no single customer contributed more than 3% of revenues. The top ten customers generated approximately 11% of revenues and the top 30 generated approximately 17%. The following table presents information on SMUD's top ten customers as of December 31, 2022.

SMUD'S LARGEST CUSTOMERS (As of December 31, 2022)

Customer Type	Annual Revenue (\$ millions)	% of Total Revenue
Technology	37.56	2.31%
Government	33.02	2.03%
Government	31.59	1.94%
Government	14.58	0.90%
Government	14.11	0.87%
Communications	9.89	0.61%
Industrial Gases	9.12	0.56%
Government	8.04	0.49%
Grocery	7.37	0.45%
Government	7.29	0.45%
Top 10 Total	172.57	10.59%

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POWER SUPPLY AND TRANSMISSION

Power Supply Resources

The following table sets forth information concerning SMUD’s power supply resources as of March 31, 2023. Capacity availability reflects expected capacities at SMUD’s load center, as well as entitlement, firm allocations and contract amounts in the month of July, which is generally SMUD’s peak month.

**POWER SUPPLY RESOURCES
(As of March 31, 2023)**

Source:	Capacity Available (MW)⁽¹⁾
Generating Facilities:	
Upper American River Project – Hydroelectric	685
Solano Wind Project – Wind ⁽²⁾	94
Hedge Battery ⁽²⁾	4
Sub-total:	783
Local Gas-Fired Plants:	
Cosumnes Power Plant	570
Carson Project.....	103
Procter & Gamble Project.....	166
McClellan	72
Campbell Soup Project	170
Sub-total:	1,081
Purchased Power:	
Western Area Power Administration (WAPA) ⁽³⁾ ⁽⁴⁾	351
Grady – Wind ⁽²⁾	34
Avangrid (Iberdrola) (PPM) – Wind ⁽²⁾	22
Feed-in-Tariff Photovoltaic – Solar ⁽²⁾	40
Rancho Seco Solar ⁽²⁾	53
NTUA Navajo Drew Solar ⁽²⁾	55
Great Valley – Solar ⁽²⁾	40
Wildflower Solar ⁽²⁾	8
Calpine Geysers – Geothermal	95
CalEnergy – Geothermal	26
Patua (Gradient/Vulcan) – Geothermal.....	12
Other Long-Term Contracts.....	18
ELCC Portfolio Adjustment ⁽²⁾	4
Sutter Calpine Thermal.....	258
Firm Contract Reserves ⁽⁴⁾	18
Committed Short-Term Purchases ⁽⁵⁾	275
Uncommitted Short-Term Purchases	8
Sub-total:	1,314
Total	3,178

⁽¹⁾ Available capacity is the net capacity available to serve SMUD’s system peak load during the month of July.

⁽²⁾ Capacity values shown are based on resource effective load carrying capability modeling.

⁽³⁾ Total includes SMUD’s Base Resource share and WAPA Customer allocations.

⁽⁴⁾ Assumes firm reserves of 5% are included.

⁽⁵⁾ Committed Short-Term Purchases are primarily purchased on a year-ahead to season-ahead basis from various sources.

Note: Totals may not add due to rounding.

Power Generation Facilities

Hydroelectric. The UARP consists of three relatively large storage reservoirs (Union Valley, Loon Lake and Ice House) with an aggregate water storage capacity of approximately 400,000 acre-feet and eight small reservoirs. Project facilities also include eight tunnels with a combined length of over 26 miles and eight powerhouses containing 11 turbines. In addition to providing clean hydroelectric power and operating flexibility for SMUD, the UARP area provides habitat for fish and wildlife and a variety of recreational opportunities, including camping, fishing, boating, hiking, horseback riding, mountain biking and cross-country skiing.

The combined capacity of the UARP is approximately 685 MW at SMUD's load center in Sacramento. Under current licensing and mean water conditions, these facilities are expected to generate approximately 1,600 GWh of electric energy annually, which represents approximately 15% of SMUD's current average annual retail energy requirements. In 1957, the Federal Power Commission (predecessor agency to FERC) issued a license to SMUD for the UARP. This 50-year license was subsequently amended to add and upgrade facilities and now includes all segments of SMUD's hydroelectric facilities located on the South Fork of the American River and its tributaries upstream from the Chili Bar Project (described below). On July 23, 2014, FERC issued to SMUD a new 50-year license for the UARP.

On November 9, 2016 FERC issued an Order authorizing SMUD to construct the South Fork Powerhouse downstream of the UARP's Slab Creek Dam. Construction was substantially completed in the fall of 2020, and the new powerhouse was placed into operation on October 25, 2022, adding 1.8 MW of generation to the UARP's overall capacity.

On June 16, 2021, pursuant to Board authorization, SMUD acquired the Chili Bar Hydroelectric Project which consists of a 7 MW powerhouse, reservoir, dam and spillway, north of Placerville on the South Fork of the American River for approximately \$10.4 million (the "Chili Bar Project"). The Chili Bar Project is immediately downstream from the UARP and operates as the regulating reservoir for the UARP's largest powerhouse. Owning the UARP and the Chili Bar Project enables SMUD to operate the two projects with a holistic approach to license compliance and generation efficiency.

Solano Wind Project. SMUD owns and operates an 87 MW wind project, located in Solano County, known as Solano 2. Solano 2 consist of 29 wind turbine generators ("WTGs") rated at 3 MW each. Energy from the project is collected at 21 kV and transmitted over a dedicated 3-mile overhead system to the SMUD-owned Russell substation. At the Russell facility, the energy is transformed to 230 kV and interconnected to PG&E's Birds Landing Switching Station. Energy deliveries are scheduled through the CAISO.

Solano 3 Project. In 2011 and 2012, SMUD constructed a 128 MW wind project adjacent to Solano Phase 2, known as Solano 3. The Solano 3 project consists of 31 WTGs rated at 1.8 MW and 24 WTGs rated at 3.0 MW. The project interconnects through a 34.5 kV underground collection system to the Russell substation. Like the Solano Phase 2 project, this energy is transformed to 230 kV and delivered through the CAISO.

Solano 4 Project. SMUD is developing the Solano 4 Wind Project on SMUD-owned land near the Solano 3 project, known as the Collinsville and Roberts properties, to install 10 WTGs rated at 4.5 MW, and to remove the Solano 1 turbines and replace them with 9 WTGs rated at 4.5 MW. SMUD received the Cluster II Phase I Study results from the CAISO in January 2019, provided the initial security posting in April 2019, and received the Phase II Study Report in November 2019, furthering the process towards a Large Generator Interconnection Agreement ("LGIA"). SMUD has met all of the CAISO requirements and has executed a LGIA as of June 2021 that will allow for 90.8 MW of capacity at the point of

interconnection. WAPA and PG&E identified upgrades needed to interconnect the Solano 4 Wind Project that may not be complete before 2024. The WAPA impacts have been resolved at no cost. PG&E has an approved project and expects to complete the needed upgrades by May of 2025. In April 2021, SMUD submitted an application for advisory review by the Solano County Airport Land Use Commission (the “Solano ALUC”) of the Solano 4 Wind Project’s consistency with the 2015 Travis Air Force Base Land Use Compatibility Plan (the “Travis Plan”). In May 2021, the Solano ALUC purported to resolve that the Solano 4 Wind Project was inconsistent with the Travis Plan. In August 2021, the Board approved the Project Environmental Impact Report, made findings overriding the Solano ALUC’s finding of inconsistency, made findings there was no alternative to the project, and approved the Solano 4 Wind Project. In September 2021, Solano County filed a writ petition challenging SMUD’s approval of the Solano 4 Wind Project based on procedural environmental, zoning and land use grounds. The parties entered into a settlement agreement on December 14, 2022, and the suit was dismissed on January 10, 2023. The settlement agreement allows for the construction of the Solano 4 Wind Project as planned.

In addition, SMUD applied for and obtained extensions of the Federal Aviation Administration Determinations of No Hazard allowing for construction of the turbines. A contract for the construction of the Solano 4 Wind Project was awarded to Vestas Corporation and the Solano 4 Wind Project is currently under construction. The expected operation date for the Solano 4 Wind Project is May 2024. Realization of the full capacity of the Solano 4 Wind Project may be delayed into the first quarter of 2025 due to the timeframe established for the PG&E required upgrades. SMUD has developed a mitigation plan for the limited interconnection capacity for the first year of operation, in coordination with CAISO and PG&E, of using all of the existing SMUD Solano Russell substation interconnection capacity combined for the dispatch of all the Solano Wind Project. SMUD completed a combined LGIA amendment administrative process, which combines all phases of the Solano Wind Project so it may operate as one project. This was fully executed by SMUD, CAISO, and PG&E on February 27, 2023.

Distributed Solar Photovoltaic. SMUD owns and operates approximately 2 MW of solar photovoltaic generating facilities. These facilities include installations at the Hedge Substation property, SMUD Headquarters, the East Campus Operations Center, and other smaller photovoltaic systems throughout the service area on parking lots.

Hedge Battery. SMUD owns and operates a 4 MW, 8 MWh, battery energy storage system located near the Hedge Substation in South Sacramento. The facility reached commercial operation in January 2023.

Local Gas-Fired Plants. SMUD constructed five local natural gas-fired plants in its service area: the Carson Project, the Procter & Gamble Project, the Campbell Soup Project, McClellan and the Cosumnes Power Plant (each defined below). These five plants are referred to collectively as the “Local Gas-Fired Plants.” These plants are a strategic component of SMUD’s resource mix. In addition to providing SMUD a total capacity of approximately 1,139 MW, the Local Gas-Fired Plants provide SMUD with needed voltage support, operational and load following capability, and the reliability inherent in having power resources located close to loads. With the exception of McClellan, these plants were financed through the issuance of project revenue bonds by separate joint powers authorities (collectively, the “Authorities”). In late 2021, ownership of all of the Local Gas-Fired Plants was transferred to one of the Authorities, SFA. SMUD has entered into long-term agreements with SFA providing for the purchase by SMUD of all of the power from each of the Local Gas-Fired Plants on a take-or-pay basis. This consolidation created operational and administrative efficiencies without changing any of the functionality of the power plants. Although the Local Gas-Fired Plants are owned by SFA, SMUD has exclusive control of their dispatch and manages their operations as part of its overall power supply strategy.

Payments under the power purchase agreements are payable from the revenues of SMUD’s Electric System prior to the payment of the principal of or interest on SMUD’s Senior Bonds and Subordinated Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below), as are other maintenance and operation costs and energy payments. For further discussion of SMUD’s obligations to make these payments to SFA, see “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – *Joint Powers Authorities*.”

The following is a brief description of the five Local Gas-Fired Plants:

The Cosumnes Power Plant (the “Cosumnes Power Plant”). The Cosumnes Power Plant is a 612 MW natural gas-fired, combined cycle plant located in the southern portion of Sacramento County adjacent to SMUD’s decommissioned Rancho Seco Nuclear Power Plant. Commercial operation of the Cosumnes Power Plant commenced on February 24, 2006. SFA increased the net generating capacity of the facility by 81 MWs via an Advanced Gas Path (“AGP”) upgrade. The additional AGP generation was realized after hardware and software upgrades were completed on both units in March of 2019. The Cosumnes Power Plant is owned by SFA, a joint powers authority formed by SMUD and MID. The existing take-or-pay power purchase agreement between SMUD and SFA expires no earlier than when the related bonds have been paid in full (the outstanding related bonds are scheduled to mature on July 1, 2030). On June 5, 2022, the Cosumnes Power Plant was shut down due to a ground fault in the STG stator. The repair was completed in February 2023 and the plant returned to service on March 5, 2023. See “FACTORS AFFECTING THE REGION – Cosumnes Power Plant Outage”.

The Carson Cogeneration Project (the “Carson Project”). The Carson Project, a 103 MW natural-gas-fired cogeneration project consisting of separate combined cycle and peaking plants, provides steam to the Sacramento Regional County Sanitation District (“SRCSD”) wastewater treatment plant adjacent to the site. The Carson Project was originally owned by the CVFA, a joint powers authority formed by SMUD and the SRCSD. Construction of the Carson Project was completed and the plant began commercial operation on October 11, 1995. The CVFA bonds were defeased in September 2019. In late 2021, ownership of the Carson Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the Carson Project will be in effect until terminated by SMUD.

The Procter & Gamble Cogeneration Project (the “Procter & Gamble Project”). The Procter & Gamble Project, a 182 MW natural gas-fired cogeneration facility, is located in an established industrial area of Sacramento. The initial combined cycle portion of the plant began commercial operation on March 1, 1997. Construction of the peaking plant portion of the Procter & Gamble Project commenced during 2000 and the unit achieved commercial status on April 24, 2001. The Procter & Gamble Project produces steam for use in Procter & Gamble Manufacturing Company’s oleochemical manufacturing processes and electricity for sale to SMUD. The Procter & Gamble Project was originally owned by the SCA, a joint powers authority formed by SMUD and SFA, a separate joint powers authority. The SCA bonds were defeased in September 2019. In late 2021, ownership of the Procter & Gamble Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the Procter & Gamble Project will be in effect until terminated by SMUD.

The Campbell Soup Cogeneration Project (the “Campbell Soup Project”). The Campbell Soup Project, a 170 MW natural gas-fired cogeneration project, was completed and began commercial operations on December 4, 1997. Upgrades were implemented during 2000, which increased the plant’s peaking capacity to 180 MW, well above its net demonstrated capacity of 159.8 MW. The plant is located in south Sacramento adjacent to the Capital Commerce Center (formerly the Campbell Soup Company food processing facility). The Campbell Soup Project was originally owned by SPA, a joint powers authority formed by SMUD and SFA. The SPA bonds were redeemed in July 2015. In late 2021, ownership of the Campbell Soup Project was transferred to SFA. The take-or-pay power purchase agreement between

SMUD and SFA relating to the Campbell Soup Project (the “Campbell Soup/McClellan PPA”) covers both the Campbell Soup Project and McClellan and will be in effect until terminated by SMUD. As part of the Zero Carbon Plan, SMUD is exploring retiring the Campbell Soup Project in 2025, contingent upon SMUD having sufficient other resources available and grid reliability can be maintained. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

The McClellan Gas Turbine (“McClellan”). McClellan is a 72 MW natural gas-fired simple cycle combustion turbine generating plant at McClellan Business Park in Sacramento. This turbine is connected to SMUD’s electric system and is operated to meet SMUD’s peak-load requirements. McClellan is aligned for remote starting and operation with both black start and fast start capabilities. SMUD constructed the McClellan unit in 1986 as a 50 MW emergency power source for the McClellan Air Force Base. In 2001, following the Air Force Base closure, McClellan was upgraded to 72 MW and converted for SMUD use. In May 2007, SMUD transferred ownership of McClellan to SPA for more efficient operation. SPA did not issue debt related to McClellan. In late 2021, ownership of McClellan was transferred to SFA. SFA passes all costs of operations and maintenance through to SMUD in accordance with the terms of the Campbell Soup/McClellan PPA. In exchange for paying all costs related to McClellan, SMUD receives all of the power generated thereby on a take-or-pay basis. As part of the Zero Carbon Plan, SMUD is exploring retiring McClellan in 2024, contingent upon SMUD having sufficient other resources available and grid reliability can be maintained. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

Fuel Supply

General. SMUD is obligated to arrange for the purchase and delivery of natural gas to the Local Gas-Fired Plants. Management of the natural gas procurement and delivery process is a key focus of SMUD’s reliability and risk policies. Although the natural gas consumption of the power plants for SMUD’s load can vary significantly depending on the season, precipitation, and the market price of power and natural gas, the plants are forecasted to need, on average in 2023, a total of approximately 97,000 Decatherms per day (“Dth/day”) with a daily peak slightly more than 171,000 Dth/day of natural gas. SMUD has implemented a comprehensive strategy to secure a reliable and diversified fuel supply through a variety of agreements for the supply, transportation, and storage of natural gas.

Supply. SMUD hedges a significant portion of its expected gas needs to meet customer power requirements. This includes gas for the Local Gas-Fired Plants and for the Sutter Energy Center. See “Power Purchase Agreements – *Sutter Energy Center*”. This is accomplished through a combination of long-term supply arrangements and an exposure reduction program. The program consists of a primary rolling three-year exposure reduction component, a fuel hedging component on a rolling three-year basis, as well as supplemental fixed calendar year components reaching out up to five calendar years. Long-term arrangements may consist of a combination of physical commodity supply contracts, financial hedges, or options. Natural gas is purchased from a wide variety of producers and marketers at the northern and southern California borders, at Alberta, Canada and from the San Juan and the Rocky Mountain supply basins. SMUD has a number of both fixed-price supply agreements and financial hedging contracts to fix gas costs ranging from one month to several years in duration. Including fixed price biogas contracts as of March 31, 2023, these contracts have hedged the price of approximately 83%, 66% and 55% of SMUD’s forecasted natural gas requirements for 2023, 2024 and 2025, respectively. While the financial effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted.

SMUD has contracted with the Northern California Gas Authority No. 1 (“NCGA”) to purchase an approximate average of 8,700Dth/day over the remaining life of a contract expiring May 31, 2027 (the “NCGA Contract”). Under the NCGA contract, SMUD pays a discounted variable price for the fuel and

anticipates periodically fixing the effective price under separate hedging contracts. Currently the delivery point for the NCGA Contract is the AECO hub in Alberta. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. To increase delivery efficiencies, SMUD expects to exchange the gas delivered at the AECO hub under the NCGA Contract with gas to be delivered at the Malin receipt point beginning in November 2023.

SMUD has also contracted with the Northern California Energy Authority (“NCEA”) to purchase an approximate average of 22,000 Dth/day or to be converted to the approximate value in Megawatt-hours (“MWh”) of electricity over the remaining life of a contract expiring on May 31, 2049. The gas will be delivered to the SMUD system via the Malin receipt point on the PG&E backbone system. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. SMUD will pay a discounted variable price for the fuel and anticipates periodically fixing the effective price under separate hedging contracts.

Renewable Natural Gas Supply. As a component of meeting SMUD’s RPS goals, SMUD procures renewable natural gas and digester gas as fuels to generate renewable electricity from the Cosumnes Power Plant. Descriptions of the renewable natural gas supply agreements are provided below.

In March 2009, SMUD entered into a 15-year contract (that qualifies as renewable energy) with Shell Energy North America (US), L.P. (“Shell Energy”) to purchase up to 6,000 Dth/day of renewable natural gas produced from a landfill project in Texas. SMUD began taking deliveries of this supply in April 2009. In March 2012, SMUD amended the contract with Shell Energy to increase the maximum volumes to 7,300 Dth/day and extended the term by 10 years to March 31, 2034. Currently, the delivery point is PG&E Topock and SMUD is using its long-term transport capacity to deliver it to the Cosumnes Power Plant. In 2016, SMUD entered into a 3-year contract with Shell Energy to sell back the entire volume of renewable natural gas purchased, less 500 Dth/day, to be sold into the vehicle transportation markets. Upon expiration of the initial 3-year contract for the sale of biogas to Shell Energy, SMUD extended the sell back of the entire volume of biogas twice for an additional 3 years with Element Markets (now Anew RNG, LLC), starting in 2020 and 2023.

SMUD contracted with Heartland Renewable Energy, LLC (“HRE”) in December 2009 for a 20-year supply of up to 7,000 Dth/day of renewable natural gas from a digester facility in Colorado. Deliveries began in March of 2014. Currently, the delivery point is Opal, Wyoming and SMUD uses its long-term transport capacity to deliver it to the Cosumnes Power Plant. HRE has not delivered volumes from the project to SMUD since December 2016 due to current litigation with Weld County, Colorado regarding odor and permit issues. EDF Renewables, the majority owner of HRE, notified SMUD in August of 2017 that it is in discussions with a short list of bidders to sell its interests in the facility. In June of 2020, the project was purchased and SMUD’s contract was assigned to the new owner, Platte River Biogas, LLC (“PRB”). SMUD and PRB terminated the contract in the third quarter of 2021.

In September 2011, SMUD and CVFA entered into a “Digester Gas Purchase and Sale Agreement” through which the Carson Project cleans nearly all of the digester gas received from Sacramento Regional County Sanitation District (“SRCSD”) and sells it to SMUD for delivery to the Cosumnes Power Plant. In return, SMUD pays all of the Carson Project’s costs in acquiring, cleaning and making the gas available to SMUD. The Digester Gas Purchase and Sale Agreement expires in September 2025. In late 2021, the Digester Gas Purchase and Sale Agreement, along with the Carson Project was transferred to SFA. The Carson Project is currently receiving, processing and selling up to 1,500 Dth/day with provisions for volume increases over time to 2,500 Dth/day. Digester gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations.

In December 2011, SMUD entered into a 20-year agreement with EIF KC Landfill Gas LLC (“EIF”) to purchase up to 7,050 Dth/day of renewable natural gas produced from multiple landfill projects. SMUD began taking deliveries of this supply in January 2014. Currently the delivery point is Kern River – Opal and SMUD uses its long-term transport capacity to deliver it to the Cosumnes Power Plant. Renewable natural gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations. In April 2022 SMUD entered into a transaction to sell the renewable natural gas purchased into the vehicle transportation markets. The transaction expires in March 2025. In 2023, SMUD entered into a 3-year contract with Anew Climate, LLC (“Anew”) to sell back the entire volume of renewable natural gas purchased, to be sold into the vehicle transportation markets.

AB 2196 is a law that defines the criteria by which existing and future renewable natural gas contracts will qualify for the State RPS program. The CEC adopted a RPS Eligibility Guidebook on April 30, 2013, which includes detailed rules for implementation of AB 2196. SMUD received an updated certificate of eligibility from the CEC in July 2014 for the Cosumnes Power Plant that included the quantities of renewable natural gas from all four contracts. The CEC adopted a revised RPS Eligibility Guidebook (Ninth Edition) on April 27, 2017. This latest guidebook did not change the RPS eligibility of any of the above SMUD renewable natural gas and digester gas contracts, but did simplify reporting requirements for these contracts. When fully delivering, these contracts represent roughly 30% of SMUD’s 2020 RPS requirement.

Gas Transmission

SMUD has satisfied its obligation to deliver natural gas to its power plants by constructing a natural gas pipeline, purchasing an equity interest in two PG&E backbone gas transmission lines, and contracting for capacity on a number of existing interstate natural gas transmission lines.

The Local Pipeline. SMUD constructed and owns a 20-inch, 50-mile natural gas pipeline in the greater Sacramento area (the “Local Pipeline”) that transports gas to all of the Local Gas-Fired Plants except McClellan. The Local Pipeline is interconnected with PG&E’s major State gas transmission lines 300 and 401. Additionally, it may be interconnected with one or more private gas gathering pipelines located in the area, a gas storage project and/or other FERC approved pipelines that may be built in the local area. In conjunction with the construction of the Cosumnes Power Plant, SMUD extended the Local Pipeline to the plant site. The 26-mile extension was completed in 2004. The extension is 24 inches in diameter and was designed to serve both the Cosumnes Power Plant and an additional second phase, if constructed.

PG&E Backbone Gas Transmission Lines 300 and 401. In 1996, SMUD purchased an equity interest in PG&E’s backbone gas transmission lines 300 and 401 (referred to as the PG&E backbone). The total capacity acquired at that time was approximately 85,000 Dth/day and consisted of approximately 43,600 Dth/day of firm gas transport from the California–Oregon border at Malin, Oregon and 44,700 Dth/day from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California. SMUD was also entitled to a share of non-firm capacity, which was approximately 4,360 Dth/day; making the total capacity potentially available to SMUD almost 90,000 Dth/day. This purchase made SMUD a co-owner of the PG&E backbone gas transmission lines 300 and 401 and obligated SMUD to pay PG&E to operate the pipelines on its behalf subject to the terms of the purchase agreement and operating protocols. PG&E reduced operating pressures on Line 300 after PG&E suffered a natural gas explosion in San Bruno, CA in September of 2010. Operating pressures and capacity may also fluctuate due to regulatory and other changes. As of December 1, 2021, SMUD holds a total capacity of approximately 87,000 Dth/day, consisting of approximately 47,572 Dth/day of firm gas transport from the California–Oregon border at Malin, and 39,193 Dth/day of firm gas transport from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California.

SMUD also holds additional backbone capacity under tariff service for 5,000 Dth/day of northern path (Redwood) capacity. This contract expires in June 2023. Currently, SMUD is not planning to renew the contract upon expiration.

Kern River Gas Transmission Company Long Term Agreement. SMUD has an agreement with Kern River Gas Transmission Company for 20,000 Dth/day of firm capacity through April 30, 2028. This capacity gives SMUD access to the Rocky Mountain supply basin at Opal, Wyoming, and connects to PG&E Line 300 (owned in part by SMUD) at Daggett, California.

TransCanada Firm Transmission Service Agreements. SMUD has several agreements with TransCanada Corporation that give SMUD access to Canadian supply from the Alberta basin to Kingsgate, British Columbia and the California-Oregon border at Malin. SMUD has agreements for 22,101 Dth/day at the California-Oregon border at Malin via the Gas Transmission Northwest (“GTN”) pipeline that expires in 2023. SMUD has agreements for approximately 12,000 Dth/day from the Alberta ANG/Foothills pipeline, also expiring in 2023. In order to match the Canadian capacity with the takeaway capacity at Malin, SMUD had an agreement with Foothills Pipeline for approximately 10,000 Dth/day that expired on October 31, 2022. Currently, SMUD is not planning to renew the GTN or the Alberta ANG/Foothills agreements.

SMUD’s diversified portfolio of gas transmission arrangements allow for the purchase of gas from a variety of suppliers and locations, and the opportunity to capitalize on regional price differentials where possible. In addition, its ownership interest in the SMUD/PG&E backbone and Local Pipeline enhances the reliability of SMUD’s gas supply.

Gas Storage

SMUD also employs gas storage as part of its overall fuel supply strategy. Gas storage is useful in helping to balance gas supply, mitigate market price volatility, and provide a reliable supply to meet peak day delivery requirements.

SMUD also has a contract with Lodi Gas Storage, LLC, which began in April 2023 and expires in March 2026, for capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

SMUD has a second contract with Lodi Gas Storage, LLC, which began in April 2022 and expires in March 2024, for additional capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

Power Purchase Agreements

SMUD has a number of power purchase agreements to help meet its power requirements. Some of these agreements are described below.

Western Area Power Administration. Effective January 1, 2005, SMUD entered into a 20-year contract with WAPA. SMUD has entered into a replacement agreement extending the term by 30 years for the period of January 1, 2025 through December 31, 2054. Power sold under this contract is generated by the Central Valley Project (“CVP”), a series of federal hydroelectric facilities in northern California operated by the United States Bureau of Reclamation. The contract provides WAPA’s CVP Base Resource customers (including SMUD) delivery of a percentage share of project generation in return for

reimbursement of an equivalent share of project costs. SMUD's CVP Base Resource share is roughly 25% of project generation and costs. This is expected to be approximately 318 MW of capacity and 661 GWh of energy in an average water year but will vary depending on precipitation. Energy available under the contract is determined by water releases required for water supply and flood control and is then shaped into higher value periods within other CVP operating constraints. More capacity and energy are typically available in spring and summer months and less in fall and winter.

SMUD also has a contract with WAPA expiring December 31, 2024, by which WAPA delivers an additional 200-300 MW per hour from projects located in the Pacific Northwest based on certain contractual parameters. In 2022, SMUD received 1,913 GWh of energy under this contract.

Avangrid (formerly Iberdrola Renewables ("Iberdrola")). SMUD has a contract with Iberdrola that provides SMUD with bundled renewable energy (energy plus RECs). The contract agreement is for 126 GWh of wind power generated in Solano County, California. The SMUD Board approved an extension of the wind contract through June 30, 2025.

Patua Project LLC. In April 2010, SMUD entered into a power purchase agreement with Patua Project LLC ("Patua"), a subsidiary of Gradient Resources, for the delivery of up to 132 MW (expected to be 120 MW nominal power output) of renewable energy from geothermal generation being developed in north central Nevada, from a Gradient Resources project known as the Patua Project. The Patua Project was to have been developed in three phases. Since 2010, the agreed upon capacity has been reduced several times. In December 2013, Phase 1 of the project, which had been reduced to 30 MW, finally achieved commercial operation. In 2014, the parties concluded negotiations on the fourth amendment to the power purchase agreement with Patua, which reduced the total capacity down to 40 MW, extended the commercial operation date of Phase 2 to January 1, 2016, and allowed Patua to add up to 13 MW of solar photovoltaics to supplement geothermal production. In addition, this amendment shifted responsibility to Patua for a portion of the long-term transmission service agreements that have been underutilized due to the project not meeting its targets. In November 2015, the Patua Project was acquired by TL Power, LLC, a wholly owned subsidiary of Cyrq Energy, Inc. ("Cyrq"). In December 2015, Cyrq terminated Phase 2. Upon termination of Phase 2, the contractual right for Cyrq to add solar photovoltaics to supplement geothermal production was reduced to 10 MW. As a result of poor performance during the first year of operation, SMUD reduced its obligation to take power from 30 MW to 25 MW. Performance continued to lag in 2015 and 2016 and SMUD further reduced its obligation to take power from 25 MW to 19 MW.

Renewable Energy Feed-In Tariff. In September 2009, SMUD's Board authorized a feed-in tariff program for the purchase of renewable energy from local renewable energy projects connected to SMUD's distribution system. SMUD's Board authorized connection of up to 100 MW under the feed-in tariff which included standard payment rates and standard purchase terms for power. The feed-in tariff program became effective on January 1, 2010. Under the feed-in tariff, SMUD has executed 20-year term power purchase agreements for solar projects totaling 98.5 MW. Construction and start-up were completed on all projects between 2010 and 2012.

CalEnergy LLC. In August 2014, SMUD entered into a 22-year power purchase agreement with CalEnergy LLC for the purchase of 30 MWs per year of renewable energy from its Salton Sea geothermal facilities. As of July 1, 2017, SMUD began receiving up to 10 MWs from the CalEnergy portfolio, which escalated to the full 30 MWs on May 1, 2020.

Rancho Seco Solar. In October 2015, SMUD entered into a 20-year power purchase agreement with Rancho Seco Solar LLC for the purchase of energy from a 10.88 MW solar PV project sited on SMUD's property at the closed Rancho Seco Nuclear Generating Station. Commercial operation was achieved in August of 2016. Rancho Seco Solar LLC leased the property from SMUD under a land lease

agreement. The output of this project directly serves two large commercial customers that executed agreements with SMUD for retail supply of solar power.

In May 2019, SMUD entered into a 30-year power purchase agreement for an additional 160 MW solar PV project with Rancho Seco Solar II, LLC. The project is located on SMUD-owned property at the closed Rancho Seco Nuclear Generating Station, adjacent to the existing 10.88 MW solar PV project. Construction began in 2019, and the project became commercially operable in February 2021.

Grady Wind Energy. In October 2015, SMUD entered into a 25-year power purchase agreement with Grady Wind Energy LLC (“Grady”) for the purchase of energy from a 200 MW wind project located in New Mexico (the “Grady Project”). The Grady Project began commercial operations on August 5, 2019. Energy from the Grady Project is delivered to CAISO. SMUD purchases 100% of the Grady Project output which includes energy, renewable energy credits, and capacity attributes. SMUD and Grady had a short-term (6-month) agreement spanning the winter 2021-spring 2022 season wherein Grady has the option to pay SMUD to curtail up to 100 MW. This agreement does not affect the remaining term of the agreement.

Great Valley Solar 2, LLC. In January 2017, SMUD entered into a 20-year power purchase agreement with Great Valley Solar 2, LLC for the purchase of energy from a 60 MW solar PV project located in Fresno County, California. The project’s commercial operation date was December 28, 2017.

ARP-Loyalton Cogen LLC. On September 14, 2016, Senate Bill 859 (“SB 859”) was signed into law. Under SB 859, a POU must procure its proportionate share of 125 MWs of renewable energy from biomass plants burning high hazard forest fuels, subject to terms of at least five years. Seven POU’s (SMUD, MID, Turlock Irrigation District (“TID”), Anaheim Public Utilities, Imperial Irrigation District, Los Angeles Department of Water & Power and Riverside Public Utilities, collectively described herein as the “ARP-Loyalton POU’s”) jointly solicited proposals for up to 29 MW of contract capacity for renewable energy to meet the requirements of SB 859. In January 2018, SMUD entered into a 5-year power purchase agreement with ARP-Loyalton Cogen LLC to fulfill 18 MWs of the required 29 MWs with SMUD’s share being just over 23 percent (the “ARP-Loyalton PPA”). See “—Roseburg Forest Product Co.” below for a discussion of the remaining SB 859 capacity. The contract became effective on April 1, 2018. On February 18, 2020, ARP-Loyalton Cogen LLC filed for Chapter 11 bankruptcy and stopped producing and selling energy from the biomass plant. On May 7, 2020, the bankruptcy court approved the sale of the Loyalton facility to Sierra Valley Enterprises, LLC (“SVE”). SVE initially expressed interest in bringing the facility back into service; however, the bankruptcy trustee requested repeated extension of the deadline for SVE to accept or reject the ARP-Loyalton PPA. The latest deadline was April 19, 2023, the date of expiration of the ARP-Loyalton PPA term. As SVE did not resume operations before the end of the ARP-Loyalton PPA term, the ARP-Loyalton POU’s have negotiated a settlement agreement with the bankruptcy trustee (the “ARP-Loyalton Settlement Agreement”). The ARP-Loyalton Settlement Agreement defines funds from the performance security that the ARP-Loyalton POU’s will keep to cover legal and administrative fees, along with a contingency amount to cover potential risk of future damages. Since the ARP-Loyalton POU’s entered into a 5-year agreement to procure compliant biomass and provided SVE the opportunity to accept the ARP-Loyalton PPA and restart operations, the ARP-Loyalton POU’s consider their statutory obligations to have been fulfilled.

Roseburg Forest Products Co. For the remaining SB 859 biomass obligation of 11 MW, SMUD and the other ARP-Loyalton POU’s have entered into a five-year power purchase agreement with Roseburg Forest Products Co. SMUD’s share of the contract capacity is 2.5795 MW, and the plant began operating under the contract on February 26, 2021.

Sutter Energy Center. SMUD entered into an initial two-year contract (with a third-year exercisable option) with Calpine Energy Services, L.P. (“Calpine”) for the ability to schedule up to 258

MWs of energy from Sutter Energy Center. The Sutter Energy Center is a natural gas-fired, combined-cycle facility located in Yuba City, California. The initial contract became effective on April 1, 2018. SMUD exercised its option to extend the contract, which expired November 1, 2020. SMUD entered into a new contract with Calpine for the same 258 MWs of energy that became effective January 1, 2021, and had an original expiration date of January 1, 2024. In December 2021, SMUD extended this contract through December 31, 2026.

Drew Solar, LLC. In June 2018, SMUD entered into a 30-year power purchase agreement with Drew Solar, LLC for the purchase of energy from a 100 MW solar PV project located in Imperial County, California. The project's scheduled commercial operation date was set to be December 31, 2021. The commercial operation date was delayed due to Force Majeure claims surrounding the COVID pandemic and supply chain constraints caused by changes in Federal regulatory requirements. The project began commercially operating on November 3, 2022.

Wildflower Solar. In October 2018, SMUD entered into a 25-year power purchase agreement with Wildflower Solar I, LLC, for the purchase of energy, capacity, and RECs from a 13 MW solar PV project located in Rio Linda, California. The project began commercially operating on December 18, 2020.

Coyote Creek (Formerly Sacramento Valley Energy Center, LLC.) In August 2021, SMUD entered into a 30-year power purchase agreement with Sacramento Valley Energy Center, LLC for the purchase of energy from a 200 MW solar PV and 100 MW four-hour Battery Energy Storage System ("BESS") capacity project located in Sacramento County, California. The project's commercial operation date was expected to be December 31, 2023. The scheduled commercial operation date has been delayed to 2026 due to ongoing development and permitting delays.

SloughHouse Solar, LLC. In September 2021, SMUD entered into a 30-year power purchase agreement with SloughHouse Solar, LLC for the purchase of energy from a 50 MW solar PV project located in Sacramento County, California. The project's commercial operation date was originally expected to be December 31, 2023, but the commercial operation date has been delayed to 2026 due to ongoing development and permitting delays.

Country Acres Solar. In December 2021, SMUD issued a Request for Offers ("RFO") seeking qualified Power Purchase Agreement offers for a utility scale PV with BESS project under development which will interconnect to SMUD's North Area transmission system. The project site is located on over 1,000 acres in Placer County near the city of Roseville. SMUD selected a developer for the power purchase agreement, which is currently expected to be in place by the third quarter of 2023. Development efforts are underway with an expected commercial operation date in late 2025 to early 2026.

Geysers Power Company, LLC. In March 2021, SMUD executed a 10-year power purchase agreement with Geysers Power Company, LLC for 100 MW of capacity from the Geysers geothermal energy plant located in Lake and Sonoma Counties, California. SMUD started to receive deliveries on January 1, 2023.

Transmission Service Agreements

TANC California-Oregon Transmission Project. The 340-mile COTP is one part of a three 500-kV line coordinated system known as the California-Oregon Intertie ("COI"). The COTP is allocated one-third of the 4,800 MW capability of the COI system (see related agreements below). TANC is entitled to use 1,390 MW and is obligated to pay approximately 80% of the operating costs of the COTP. SMUD is a member of TANC and a party to Project Agreement No. 3 ("PA3"), under which it is entitled to 378 MW and obligated to pay on an unconditional take-or-pay basis about 27.5% of TANC's COTP debt service and

operations costs, subject to a “step-up” obligation of up to 25% of its entitlement share upon the unremedied default of another TANC member-participant. In 2009, SMUD entered into a long-term layoff agreement with certain members that increased SMUD’s entitlement by 35 MW. In 2014, SMUD entered into another long-term layoff agreement with certain other members that increased SMUD’s COTP entitlements by 128 MW and amended the 2009 layoff agreement that returned 13 MW to a member. As of December 31, 2018, SMUD was entitled to approximately 528 MW of TANC’s transfer capability for imports and 405 MW for exports, and is obligated to pay approximately 38.6% of TANC’s COTP debt service and operations costs. SMUD’s payments under this contract, like SMUD’s payments under its other power purchase and transmission service agreements, are treated as “Maintenance and Operation Costs” or “Energy Payments” under the resolutions securing the Senior Bonds and Subordinated Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below). SMUD relies on its COTP rights to purchase power, access contingency reserves through the Western Power Pool, and obtain renewable resources to supplement its own resources to serve its load. TANC maintains its own property/casualty insurance program. TANC’s budget for COTP costs, support services and advocacy expenses is about \$45.4 million for 2023. SMUD’s obligation of the TANC budget is about \$17.4 million for 2023.

TANC Tesla-Midway Transmission Service. TANC has a long-term contract with PG&E to provide TANC with 300 MW of transmission service between PG&E’s Midway Substation and the electric systems of the TANC Members (the “Tesla-Midway Service”). SMUD’s share of the Tesla-Midway Service had been 46 MW. As part of the 2009 long-term layoff agreement, SMUD acquired an additional 2 MW of South-of Tesla Principles (“SOTP”) transmission rights for 15 years starting February, 2009 from another TANC member, bringing SMUD’s share of the Tesla-Midway Service to 48 MW.

Bonneville Power Administration. In 2009, SMUD entered into a transmission service agreement with the Bonneville Power Administration (“BPA”) for 60 MW of firm point-to-point transmission service from BPA’s Hilltop substation in north eastern California to the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua geothermal project over BPA’s 230kV transmission lines. In early 2013, in accordance with BPA’s transmission tariff, the transmission service was split into two 30 MW services and deferred as appropriate to better fit the timing of expected commercial operation of Phase 1 and Phase 2 of the Patua Project. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Patua Project LLC.” SMUD submitted another request for the 30 MW of transmission procured for Phase 2 of the Patua Project to split the service into a 10 MW and a 20 MW service, with the 10 MW of service deferred and timed with the originally expected commercial operation date of Phase 2 of the Patua Project. With the termination of Phase 2 of the Patua Project and SMUD’s reduced obligation due to the poor performance of Phase 1 of the Patua Project, much of the transmission reserved for it will no longer be needed. BPA does not have a provision in its transmission tariff for early termination of transmission service. However, the power purchase agreement with Patua requires Patua to cover unused transmission that SMUD has procured for the Patua purchases. On January 1, 2020, SMUD’s transmission rights with BPA were reduced to 19 MW. This now aligns with SMUD’s PacifiCorp transmission rights of 19 MW described in the immediately following paragraph.

PacifiCorp. In 2009, SMUD entered into a transmission service agreement with PacifiCorp for 60 MW of firm point-to-point transmission service across PacifiCorp’s high voltage step-up transformer at the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua Project. In early 2013, in accordance with PacifiCorp’s transmission tariff, the commencement of the 60 MW of transmission service was deferred to fit the timing of first deliveries expected from the 30 MW of Phase 1 of the Patua Project. In 2013, SMUD terminated the 60 MW of transmission service and requested two new transmission services of 30 MW each, with service start dates timed to better fit with the expected start dates of Phase 1

and Phase 2 of the Patua Project. With the reduction in expected output of the Patua Project, SMUD terminated the second 30 MW transmission agreement, and replaced it with a 10 MW transmission service agreement for Phase 2 of the Patua Project. With the termination of Phase 2 of the Patua Project, SMUD terminated the 10 MW Pacificorp transmission service agreement and as a result of the reduced obligation to take power from the Patua Project, SMUD has reduced its remaining Pacificorp transmission service from 30 MW to 19 MW.

Western Area Power Administration. SMUD does not have a direct interconnection of its power system to the COTP. To receive power deliveries that use its COTP rights, SMUD has a long-term transmission service agreement with WAPA for transmission of 342 MW of power from the COTP line (received at WAPA's Tracy or Olinda substations) to SMUD's system. In May of 2011, WAPA completed the Sacramento Voltage Support Transmission Project. Completion of this project has given SMUD an additional 165 MW of transmission service rights on WAPA's system from the COTP at the Olinda Substation to SMUD's system at the Elverta Substation.

Projected Resources

The following tables titled "Projected Requirements and Resources to Meet Load Requirements Energy Requirements and Resources" (the "Energy Table") and "Capacity Requirements and Resources Net Capacity – Megawatts" (the "Capacity Table") describe SMUD's contracted commitments and owned resources available to meet its forecasted load requirements through the year 2032. Resources are shown on an annualized basis with market purchases netted against surplus sales to arrive at a single net position for each year. Because SMUD's available resources do not exactly match its actual load requirements on an hourly basis, there are times during a year when resources available will either exceed or be insufficient to meet SMUD's needs. Expected actual capacity values are included in the tables. These values may differ from measured net demonstrated capacity values of the Local Area Gas-Fired Plants. The table below also includes the impact energy efficiency has on resource requirements as discussed below under "Demand Side Management Programs." See "BUSINESS STRATEGY" and "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Local Gas-Fired Plants.*"

Resources listed in both the Energy Table and the Capacity Table are listed as either renewable or non-renewable. Generally, SMUD follows the CEC guidelines for eligibility requirements. Some of SMUD's renewable resources listed include solar, wind, geothermal, small hydroelectric facilities with a capacity of 30 MW or less, and biomass (representing generation from a fuel comprised of agricultural wastes and residues, landscape and tree trimmings, wood and wood waste).

As in any forecast, assumptions are made. In both the Energy Table and the Capacity Table the WAPA and UARP forecasts assume average water conditions throughout the period. On the capacity table, WAPA and Cosumnes Power Plant renewable capacity is estimated based on the ratio of renewable energy to total WAPA or Cosumnes Power Plant energy. See "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – *Hydroelectric.*"

The Uncommitted Purchases (Sales) on the tables represent either anticipated future needs or surpluses. Future needs are met well in advance of delivery. They also include both renewable and non-renewable resources.

The Transmission Losses represent reductions in the amount of energy or capacity from the location it was purchased to the point of entering SMUD's electrical system. This amount reduces the Total Resources available to meet the Total Projected Energy Requirements of the electrical system.

Demand Side Management Programs

SMUD's demand-side management initiatives represent an integral element of its total resource portfolio, and are organized into two major components: energy efficiency and load management programs. Energy efficiency offerings include a wide variety of programs and services to customers to retrofit or upgrade existing equipment and fixtures and to install new energy efficiency measures in existing and new construction facilities. Load management allows SMUD to reduce the load on the electric system by cycling residential air conditioning, and calling upon commercial/industrial customers to curtail energy usage when energy is constrained during the summer or system emergencies. Load management programs are projected to allow SMUD to shed approximately 60 MW of peak load in an emergency on a hot day, representing about 2% of SMUD's maximum system peak demand.

The customer "smart meter" system with 2-way communication capability provides information regarding customer usage patterns, which is expected to help SMUD tailor rate designs that provide customers with both the information and ability to manage their energy usage around high energy cost periods.

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**PROJECTED REQUIREMENTS AND RESOURCES TO MEET
LOAD REQUIREMENTS⁽¹⁾
ENERGY REQUIREMENTS AND RESOURCES (GWh)**

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Renewable Resources										
<u>District or Joint Powers Authority Owned:</u>										
UARP - Small Hydro ⁽²⁾	115	93	92	94	94	95	94	94	94	95
Solano Wind	585	738	895	902	902	904	902	902	902	904
Cosumnes-Shell Landfill Gas and Digester Gas ⁽³⁾	48	166	167	582	692	692	692	692	692	692
Total	748	996	1,154	1,578	1,688	1,691	1,688	1,688	1,688	1,691
<u>Purchases</u>										
Western (WAPA) – Small Hydro ⁽²⁾	13	15	15	15	15	15	15	15	15	15
Grady – Wind	933	900	897	897	897	900	897	897	897	900
Avangrid (Iberdrola) (PPM) - Wind	97	98	45	0	0	0	0	0	0	0
Patua (Gradient/Vulcan) – Geothermal	140	147	147	147	147	147	147	147	141	147
Geysers – Geothermal	876	878	876	876	876	878	876	876	876	878
Cal Energy – Geothermal	218	224	223	223	223	224	223	223	223	224
Great Valley SolarShares	167	170	171	171	169	169	169	166	166	167
Rancho Seco PV2	261	332	330	328	327	325	323	322	320	319
Rancho Seco PV	21	22	22	22	22	22	22	22	22	22
Feed-in-Tariff Photovoltaic – Solar	205	209	208	207	206	205	204	203	202	60
Navajo Drew (NTUA) Solar	299	301	298	297	285	276	273	264	271	237
Sloughhouse (Kings Country)	0	0	0	131	124	124	123	122	122	121
Wildflower Solar	31	31	31	31	33	32	33	31	32	32
CoyoteCreek (SVEC) Solar	0	0	0	519	505	502	500	497	495	492
Country Acres	0	0	0	710	706	703	699	696	692	689
Other Long-Term Contracts	145	150	140	29	8	8	6	6	6	6
Future Renewables	0	0	0	0	1,044	1,989	3,351	4,206	4,537	5,870
Total	3,404	3,477	3,403	4,602	5,587	6,521	7,861	8,693	9,018	10,179
Non-Renewable										
<u>District or Joint Powers Authority Owned:</u>										
UARP – Large Hydro ⁽²⁾	2,561	1,614	1,627	1,647	1,618	1,625	1,635	1,625	1,617	1,626
Cosumnes Power Plant	3,428	4,173	4,187	3,685	2,511	1,792	675	530	528	525
Procter & Gamble Project	786	859	809	831	123	43	2	3	5	4
Carson Project	423	480	435	401	3	0	1	3	4	4
Campbell Soup Project	776	929	926	0	0	0	0	0	0	0
McClellan	24	61	0	0	0	0	0	0	0	0
Total	7,998	8,116	7,984	6,565	4,256	3,460	2,313	2,160	2,155	2,160
<u>Purchases</u>										
Western (WAPA) – Large Hydro ⁽²⁾	410	482	485	485	485	485	485	485	485	485
Western (WAPA) Customers (Wheeling) ⁽²⁾	25	37	38	38	38	38	38	38	38	38
Calpine Sutter	1,733	1,695	1,660	1,585	0	0	0	0	0	0
Committed Purchases	0	0	0	0	0	0	0	0	0	0
Total	2,168	2,213	2,182	2,108	523	523	523	523	523	523
Total Resources	14,319	14,803	14,723	14,852	12,053	12,195	12,384	13,064	13,383	14,552
Uncommitted Purchases / (Sales)	(3,382)	(3,773)	(3,606)	(3,599)	(1,067)	(920)	(921)	(1,374)	(1,471)	(2,351)
Transmission Losses (COTP/CVP)	(3)	(11)	(11)	(9)	(82)	(102)	(129)	(146)	(152)	(179)
Total Projected Energy Requirements	10,933	11,018	11,106	11,244	10,903	11,174	11,335	11,544	11,759	12,021
Energy Efficiency (EE)	16	30	44	57	69	79	89	99	108	117
Customer PV	63	121	181	238	793	844	894	943	988	1,033
Expected Electric Vehicle (EV) Charging	(34)	(75)	(143)	(228)	(324)	(430)	(545)	(674)	(803)	(947)
Electric Building (EB)	(12)	(28)	(50)	(77)	(108)	(146)	(201)	(267)	(339)	(412)
Battery Storage (Utility)	0	0	0	0	(121)	(142)	(188)	(225)	(232)	(266)
Battery Storage (BTM)	(0)	(0)	(1)	(1)	(7)	(11)	(17)	(23)	(31)	(38)
Total Gross Energy Requirements before EE, PV and EV Charging	10,966	11,066	11,136	11,233	11,205	11,368	11,368	11,396	11,451	11,508

(1) Totals may not sum due to rounding.

(2) [2023 based on current precipitation levels as of March 31, 2023. All other years assume average precipitation.]

(3) Includes a biomethane contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”).

CAPACITY REQUIREMENTS AND RESOURCES⁽¹⁾
NET CAPACITY – MEGAWATTS

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Load:										
Planned Peak	2,806	2,807	2,813	2,820	2,766	2,784	2,790	2,795	2,800	2,808
Transmission Losses	28	28	28	28	28	28	28	28	28	28
Dispatchable Demand Resource	(71)	(71)	(71)	(71)	(165)	(183)	(202)	(165)	(165)	(165)
Adjusted Peak	2,764	2,764	2,770	2,778	2,629	2,629	2,616	2,658	2,663	2,671
Reserve Margin	415	415	416	417	394	394	392	399	399	401
Adjusted Peak with Reserves	3,178	3,179	3,186	3,194	3,023	3,023	3,008	3,057	3,062	3,072
Renewable Resources										
District or Joint Powers Authority Owned:										
UARP – Small Hydro	45	45	45	45	45	45	45	45	45	45
Solano Wind	94	97	158	202	204	194	197	198	201	201
Cosumnes – Shell Landfill Gas and Digester Gas ⁽²⁾	7	7	26	94	120	120	120	120	120	120
Total	146	148	229	341	369	359	362	363	365	366
Purchases										
Western (WAPA) – Small Hydro	10	10	9	9	9	9	9	9	9	9
Grady – Wind	34	33	33	32	32	33	33	33	29	29
Avangrid (Iberdrola) (PPM) - Wind	22	21	--	--	--	--	--	--	--	--
Patua (Gradient/Vulcan) – Geothermal	12	12	12	12	12	12	12	12	12	12
CalEnergy– Geothermal	26	26	26	26	26	26	26	26	26	26
Geysers – Geothermal	95	95	95	95	95	95	95	95	95	95
Great Value Solar Shares	40	35	33	14	14	15	16	15	14	13
Rancho Seco – PV1	3	3	3	0	1	2	1	1	1	1
Rancho Seco – PV2	50	66	61	16	23	26	19	17	14	11
Feed-in-Tariff Photovoltaic - Solar	40	35	31	7	10	13	6	8	5	5
Wildflower Solar	8	4	4	1	1	2	2	1	1	1
Navajo Solar	55	49	45	14	16	19	16	14	11	9
Sloughhouse Solar	--	--	--	14	15	17	15	14	13	12
CoyoteCreek Solar with Storage	--	--	--	154	147	152	147	145	143	141
CountryAcre with Storage	--	--	--	225	214	219	213	209	206	204
Stand-alone Storage	4	4	4	4	521	521	625	664	844	994
Future Renewables Solar, Wind	--	--	--	--	90	209	215	289	333	346
Future Firm Renewables (Geo)	--	--	--	--	--	12	125	125	125	185
Other Long-Term Contracts	18	18	17	2	2	2	2	2	2	2
Total	414	410	371	625	1,228	1,383	1,576	1,678	1,881	2,093
Non-Renewable										
District or Joint Powers Authority Owned:										
UARP – Large Hydro	640	640	640	640	640	640	640	640	640	640
Cosumnes Power Plant	563	563	544	476	450	450	450	450	450	450
Carson Project	103	103	103	103	100	100	100	100	100	100
Procter & Gamble Project	166	166	166	166	166	166	166	150	150	150
McClellan	72	72	--	--	--	--	--	--	--	--
Campbell Soup Project	170	170	170	--	--	--	--	--	--	--
Total	1,714	1,714	1,623	1,385	1,356	1,356	1,356	1,340	1,340	1,340
Purchases										
Western (WAPA) – Large Hydro	323	309	304	304	304	304	304	304	304	304
Western (WAPA) Customers (wheeling)	19	18	18	18	18	18	18	18	18	18
Sutter Energy Center	258	258	258	258	--	--	--	--	--	--
Firm Contract Reserves ⁽³⁾	18	17	17	17	17	17	17	17	17	17
Committed Purchases	275	--	--	--	--	--	--	--	--	--
Total	892	602	596	596	338	338	338	338	338	338
Total Variable Renewal Diversity Benefit/(Risk)	4	107	124	263	164	131	162	178	199	215
Uncommitted Purchases / (Sales)	7	197	242	(16)	(432)	(544)	(787)	(840)	(1,062)	(1,281)
Total Resources	3,178	3,179	3,186	3,194	3,023	3,023	3,008	3,057	3,062	3,072

⁽¹⁾ [Based on information available as of March 31, 2023]. Totals may not sum due to rounding. [Capacity values for wind, solar, storage, and future variable renewable projects shown are based on resource effective load carrying capability (ELCC) modeling.]

⁽²⁾ [The Cosumnes Power Plant is a 495 MW plant that includes 100 MW capacity attributable to a biogas contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”) and 395 MW capacity from natural gas.]

⁽³⁾ [SMUD assumes that for all firm system purchases, the suppliers will be planning 5% reserves.]

Balancing Authority Area Agreements

Background. SMUD began operating as an independent control area, later termed a Balancing Authority, on June 18, 2002 within the WECC reliability organization's region. This reduced SMUD's exposure to the costs and reliability risks of the CAISO's markets. SMUD expanded its operational footprint beyond SMUD's service territory to include WAPA's electric system, including the MID, Roseville, and Redding service areas (on January 1, 2005) and the COTP (on December 1, 2005). As described further below, SMUD ceased to be the Balancing Authority on April 30, 2011, as BANC took SMUD's place as the Balancing Authority. SMUD remains the operator of the Balancing Authority through a contract with BANC. SMUD administers the contracts with WAPA and TANC to provide specified Balancing Authority-related and other services, and is compensated by WAPA and TANC for its added labor expense. TANC recovers such Balancing Authority services costs as a part of its annual operating budget from the COTP Participants and WAPA recovers its Balancing Authority services costs through its rates for power and transmission service. The agreement with WAPA, among other terms, establishes operating reserve obligations between the parties. WAPA in turn has agreements with electric systems connected to it to assure that such systems also operate reliably (i.e., MID, Roseville and Redding). As a result of the transition to BANC as the Balancing Authority, SMUD assigned or terminated its interconnection and operations agreements with other interconnecting Balancing Authority areas (i.e., CAISO, BPA and TID). BANC is now the party to these agreements as they primarily address only Balancing Authority matters required for compliance with the reliability standards issued by the North American Electric Reliability Corporation ("NERC"), such as emergency assistance arrangements. See also "OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Western Energy Imbalance Market."

Reliability Standards. The Energy Policy Act of 2005 gave FERC authority to enforce reliability standards for the bulk electric system. In June 2007, these standards became mandatory for SMUD and BANC.

In 2022, SMUD and BANC underwent a combined NERC/WECC audit to evaluate compliance with applicable reliability standards. These audits occur every three years. At the conclusion of the audit, regulators determined that neither entity had any compliance violations related to the Operations and Planning or Critical Infrastructure Protection Standards. SMUD and BANC will undergo another NERC/WECC audit sometime in 2025.

Balancing Authority of Northern California. SMUD, MID, Redding and Roseville executed a Joint Exercise of Powers Agreement (the "BANC JPA Agreement") creating BANC on May 8, 2009. BANC became operational on May 1, 2011 as a Balancing Authority and replaced SMUD as the entity responsible for Balancing Authority-related reliability standards. Since that time, the Trinity Public Utilities District and the City of Shasta Lake have also become members of BANC. As provided in the BANC member agreement, liability for penalties associated with such Balancing Authority-related reliability standards are shared on a *pro rata* basis among the members of BANC. SMUD is the Balancing Authority operator under contract and performs Balancing Authority operational functions on behalf of BANC, much as it did when it was the Balancing Authority. The BANC JPA Agreement assigns cost responsibility based on member load within the BANC Balancing Authority, with SMUD representing approximately 70% of the total load.

Power Pool and Other Agreements

Western Power Pool Agreement. The Western Power Pool ("WPP") is an agreement among over 30 utilities and public agencies in the western United States to coordinate contingency reserve sharing, referred to as the WPP Reserve Sharing Program ("RSP"). The RSP permits participants to rely on one

another in the event that any participant experiences a generating resource outage. While SMUD became an RSP participant in 2009, participation is limited to Balancing Authorities, which SMUD relinquished to BANC in 2011. Under the RSP, BANC and TID (also a WPP member) share their reserve amounts and when necessary may call upon WPP reserves using BANC member systems and unused COTP rights. The WPP RSP permits members to operate more efficiently by reducing the contingency reserves that they would otherwise need to have available if they could not rely on each other.

TANC-SMUD OASIS Administration Agreement. SMUD entered into an agreement with TANC to provide OASIS services (transmission sales and scheduling related services in the BANC BA of TANC members' COTP rights) on September 29, 2005. SMUD is compensated for performing these services. TANC and SMUD entered into a letter agreement dated October 25, 2010 to clarify each party's role for regulatory reliability standards compliance responsibilities and take into account SMUD's increased efforts related to supporting TANC's compliance requirements. SMUD and TANC entered into an agreement to transition this service to the Western Area Power Administration, effective on May 1, 2023. Going forward SMUD will only have a minor role in receiving payments and distributing revenues to the TANC members.

Other Agreements with PG&E

Background. SMUD's electric system was originally purchased from PG&E in 1947. SMUD's service area is mostly surrounded by PG&E's service area and the two electric systems are interconnected at SMUD's Rancho Seco and Lake 230-kV substations.

Interconnection Agreement. PG&E and SMUD executed a Replacement Interconnection Agreement ("RIA") which became effective on January 1, 2010. The RIA provides that SMUD and PG&E operate their interconnections reliably, plan their electric systems to meet their load requirements, and avoid or mitigate impacts they cause by certain electric system modifications. The new agreement has a termination date of December 31, 2024, subject to FERC approval.

Generator Interconnection Agreements. SMUD signed a LGIA with CAISO and PG&E for the Solano 3 Wind Project, effective December 16, 2008, with a 50-year term. The Solano 2 Wind Project has interconnection rights granted through a LGIA, also with the CAISO and PG&E. The agreement became effective in January 2010 and has a term of 20 years. On June 3, 2021, SMUD entered into a LGIA with the CAISO and PG&E, for the planned 90.8 MW Solano 4 Wind project with a 10-year term and automatic renewal for successive one-year terms thereafter. On February 27, 2023, SMUD completed a combined LGIA amendment administrative process which combines the Solano 2, 3 & 4 projects into one Solano Wind Project. The original agreement conditions for the individual projects are carried forward with a new combined project maximum production limit of 320.8 MW at the point of interconnection at the Russell Substation.

Other generator interconnection agreements include a Small Generator Interconnection Agreement with PG&E for Slab Creek with a 22-year term which became effective on January 14, 2010, and a Small Generator Interconnection Agreement with PG&E for the Chili Bar Project with a 10-year term which became effective on June 2, 2021.

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SELECTED OPERATING DATA

Selected operating data of SMUD for the four years ended December 31, 2019 through 2022, and for the three months ended March 31, 2023 and March 31, 2022 are presented in the following table.

SMUD SELECTED OPERATING DATA CUSTOMERS, SALES, SOURCES OF ENERGY AND REVENUES

	Three Months Ended March 31,		Year Ended December 31,			
	2023	2022	2022	2021	2020	2019
Customers at End of Period:						
Residential	577,659	573,693	576,471	572,786	568,741	565,103
Commercial and industrial	69,503	69,531	69,512	69,426	68,628	68,203
Other	7,284	7,331	7,290	7,345	7,354	7,406
Total	<u>654,446</u>	<u>650,555</u>	<u>653,273</u>	<u>649,557</u>	<u>644,723</u>	<u>640,712</u>
MWh Sales:						
Residential	1,108,861	1,010,095	4,763,277	4,749,079	4,906,566	4,493,548
Commercial and industrial	1,234,611	1,313,519	5,805,052	5,649,474	5,453,120	5,616,920
Other	14,045	14,272	53,965	54,473	55,590	55,770
Total	<u>2,357,517</u>	<u>2,337,886</u>	<u>10,622,294</u>	<u>10,453,026</u>	<u>10,415,276</u>	<u>10,166,238</u>
Surplus power/out of area sales	<u>989,530</u>	<u>551,317</u>	<u>2,493,651</u>	<u>2,774,907</u>	<u>2,259,991</u>	<u>1,878,205</u>
Total	<u>3,347,047</u>	<u>2,889,203</u>	<u>13,115,945</u>	<u>13,227,933</u>	<u>12,675,267</u>	<u>12,044,443</u>
Sources of Energy Sold MWh:						
Generated by SMUD	1,683,465	1,297,158	4,368,126	6,776,244	6,414,380	7,143,944
Purchased or exchanged	1,773,658	1,679,188	9,162,576	6,884,003	6,691,279	5,324,217
Total	<u>3,457,123</u>	<u>2,976,346</u>	<u>13,530,702</u>	<u>13,660,247</u>	<u>13,105,659</u>	<u>12,468,161</u>
Less System losses and SMUD usage	<u>106,194</u>	<u>87,143</u>	<u>414,757</u>	<u>432,314</u>	<u>430,392</u>	<u>423,718</u>
Total	<u>3,350,929</u>	<u>2,889,203</u>	<u>13,115,945</u>	<u>13,227,933</u>	<u>12,675,267</u>	<u>12,044,443</u>
Gross System peak demand (kW) ⁽¹⁾	1,549,000	1,526,000	3,263,000	3,019,000	3,057,000	2,927,000
Average kWh sales per residential customer ⁽²⁾	1,921	1,762	8,293	8,316	8,650	7,987
Average Revenue per kWh Sold:						
Residential ⁽²⁾ (cents)	14.52	14.34	16.73	16.20	15.27	14.90
Commercial & industrial ⁽²⁾ (cents)	13.91	12.11	13.97	13.95	13.17	12.71

⁽¹⁾ Peak system MW values are measured at the four SMUD interconnection points and exclude SMUD's generation losses. Historical values include the impacts of dispatchable, non-dispatchable, and energy efficiency program capacity savings.

⁽²⁾ The average kWh sales per residential customer and the average revenue per kWh sold are calculated based upon billed and unbilled sales.

Source: SMUD

SELECTED FINANCIAL DATA

SMUD Financial Information

The following table presents selected financial data of SMUD. Under generally accepted accounting principles, data with respect to SMUD's component units, such as the Authorities, is included with that of SMUD. The following presents data for SMUD only and not its component units, such as the Authorities. SMUD's audited financial statements for the years ended December 31, 2022 and December 31, 2021 are included in APPENDIX B attached to this Official Statement. The following unaudited data for SMUD (excluding its component units) is drawn from SMUD's financial records that have been subjected to the auditing procedures applied in the audits of SMUD's and its component units financial statements for the years ended December 31, 2019 through 2022. The selected financial data for the periods ended March 31, 2023 and March 31, 2022 are derived from SMUD's unaudited financial records, which

have been prepared on the same basis as SMUD’s data for the years ended December 31, 2019 through 2022. The selected financial data for the period ended March 31, 2023 are not necessarily indicative of the financial data to be expected for the entire year ending December 31, 2023.

SMUD FINANCIAL DATA⁽¹⁾
(thousands of dollars)

	Three Months Ended March 31,		Year Ended December 31,			
	2023	2022	2022	2021 (Restated)	2020	2019
Summary of Income						
Operating Revenues ⁽²⁾	\$ 466,524	\$ 378,404	\$ 2,138,655	\$ 1,784,290	\$1,582,979	\$1,553,167
Operating Expenses	(489,270)	(376,017)	(2,102,849)	(1,464,069)	(1,397,845)	(1,412,199)
Operating Income (Loss)	(22,746)	2,387	35,806	320,221	185,134	140,968
Interest and Other Income (Expense)	32,593	10,777	124,704	108,788	63,014	(21,113)
Interest Expense	(18,608)	(19,294)	(74,702)	(81,692)	(80,699)	(66,185)
Change in Net Position	<u>\$ (8,761)</u>	<u>\$ (6,130)</u>	<u>\$ 85,808</u>	<u>\$ 347,317</u>	<u>\$ 167,449</u>	<u>\$ 53,670</u>
Selected Statement of Net Position Information						
Net Plant in Service	\$ 3,604,649	\$ 3,413,234	\$ 3,654,725	\$ 3,502,335	\$3,234,208	\$3,187,135
Construction Work in Progress	343,966	409,932	323,499	365,478	460,155	351,584
Electric Utility Plant – Net.....	<u>\$ 3,948,615</u>	<u>\$ 3,823,166</u>	<u>\$ 3,978,224</u>	<u>\$ 3,867,813</u>	<u>\$3,694,363</u>	<u>\$3,538,719</u>
Unrestricted Cash.....	\$ 554,360	\$ 536,534	\$ 591,410	\$ 569,001	\$ 662,155	\$ 451,800
Rate Stabilization Fund.....	\$ 151,118	\$ 193,608	\$ 156,016	\$ 188,992	\$ 168,726	\$ 143,669
Total Assets	\$ 6,297,170	\$ 6,032,532	\$ 6,421,666	\$ 6,096,865	\$5,826,449	\$5,429,137
Net Position	\$ 2,368,958	\$ 2,286,511	\$ 2,377,719	\$ 2,291,910	\$1,944,593	\$1,777,145
Long-Term Debt ⁽³⁾	\$ 2,228,327	\$ 2,378,960	\$ 2,236,824	\$ 2,387,686	\$2,523,921	\$2,166,389
Debt Service Coverage Ratios						
Parity Debt Service Coverage Ratio ..			2.04x	2.59x	2.25x	2.11x
Parity and Subordinate Debt Service Coverage Ratio.....			1.94x	2.47x	2.14x	2.06x

(1) The financial statements of SMUD comprise financial information of SMUD along with its component units, CVFA, SPA, SCA, SFA, NCGA and NCEA. This table includes only financial information of SMUD excluding its component units. Net operating revenues and expenses and Electric Utility Plant and Capitalization of CVFA, SPA, SCA, SFA, NCGA and NCEA are not included in this table, although amounts paid to or received from the Authorities by SMUD are included.

(2) Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund for each full year as follows:

- 2023 (\$4.9) million through March 31, 2023
- 2022 (\$33.0) million
- 2021 \$20.3 million
- 2020 \$25.1 million
- 2019 \$47.0 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See “RATES AND CUSTOMER BASE – Rates and Charges” above.

(3) Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

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Financial Information of SMUD and the Authorities

The following table presents a summary of selected financial information for SMUD and the Authorities.

SUMMARY OF FINANCIAL INFORMATION OF SMUD AND THE AUTHORITIES FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021 (thousands of dollars)

	Year Ended December 31, 2022			Year Ended December 31, 2021 (Restated)		
	SMUD	Authorities	Total ⁽¹⁾	SMUD	Authorities	Total ⁽¹⁾
Summary of Income						
Operating Revenues ⁽²⁾	\$ 2,138,655	\$ 166,674	\$ 2,147,334	\$ 1,784,290	\$ 270,694	\$ 1,790,276
Operating Expenses	(2,102,849)	(120,798)	(2,065,652)	(1,464,069)	(250,980)	(1,450,341)
Operating Income	35,806	45,876	81,682	320,221	19,714	339,935
Interest and Other Income	124,704	1,871	90,044	108,788	712	108,114
Interest Expense.....	(74,702)	(26,482)	(101,184)	(81,692)	(27,608)	(109,300)
Change in Net Position.....	\$ 85,808	\$ 21,265	\$ 70,542	\$ 347,317	\$ (7,182)	\$ 338,749
Selected Statement of Net Position Information						
Net Plant in Service	\$3,654,725	\$ 285,346	\$3,653,281	\$3,502,335	\$ 307,755	\$3,523,243
Construction Work in Progress.....	323,499	24,259	347,758	365,478	1,819	367,297
Electric Utility Plant – Net	\$3,978,224	\$ 309,605	\$4,001,039	\$3,867,813	\$ 309,574	\$3,890,540
Unrestricted Cash	\$ 591,410	\$ 36,454	\$ 627,864	\$ 569,001	\$ 61,375	\$ 630,376
Rate Stabilization Fund	\$ 156,016	--	\$ 156,016	\$ 188,992	--	\$ 188,992
Total Assets	\$6,421,666	\$1,133,461	\$7,191,063	\$6,096,865	\$1,179,848	\$6,916,205
Net Position.....	\$2,377,719	\$ 271,836	\$2,366,803	\$2,291,910	\$ 286,890	\$2,296,261
Long-Term Debt ⁽³⁾	\$2,236,824	\$ 787,215	\$3,024,039	\$2,387,686	\$ 826,171	\$3,213,857

⁽¹⁾ Financial information for SMUD and the SMUD JPAs (CVFA, SPA, SCA, SFA, NCGA and NCEA) include intercompany balances. The financial information reflects balances after the elimination of intercompany accounts including Authorities distributions to SMUD of \$36.5 million in 2022 and \$1.4 million in 2021.

⁽²⁾ Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund as follows:
2022 (\$33.0) million
2021: \$20.3 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See "RATES AND CUSTOMER BASE – Rates and Charges" above.

⁽³⁾ Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

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Management's Discussion of SMUD's Operating Results

Three Months Ended March 31, 2023 (Unaudited). For the three months ended March 31, 2023, SMUD reported a decrease in net position of \$8.8 million as compared to a decrease of \$6.1 million for the three months ended March 31, 2022.

Operating revenues were \$88.1 million higher than 2022. This was primarily due to higher sales of surplus power (\$47.1 million), sales to customers (\$29.0 million), and transfers from the rate stabilization fund (\$9.3 million).

Operating expenses were \$113.3 million higher than 2022. This was primarily due to higher purchased power expenses (\$42.7 million), amortization of pension and OPEB (\$19.5 million), transmission and distribution maintenance expenses (\$12.6 million), administrative and general expenses (\$11.5 million), depreciation expense (\$9.7 million), production expenses (\$4.1 million), production maintenance expenses (\$3.5 million), customer service and information expenses (\$3.3 million), public good expenses (\$2.6 million), and customer accounts expenses (\$2.0 million).

Non-Operating income was \$21.8 million higher than 2022. This was primarily due to a gain on land sale (\$14.3 million), higher interest income (\$6.0 million), and unrealized holding gains (\$2.6 million) offset by investment expenses (\$2 million).

Interest expense decreased \$0.7 million from 2022.

Year Ended December 31, 2022. For the year ended December 31, 2022, SMUD reported an increase in net position of \$85.8 million as compared to an increase of \$347.3 million for 2021.

Operating revenues were \$354.4 million higher than 2021. This was primarily due to higher sales to customers (\$130.7 million), sales of surplus gas (\$96.0 million), sales of surplus power (\$62.2 million), transfers from the RSF (\$24.3 million), customer fees (\$9.5 million), AB 32 revenue (\$4.9 million) and LCFS revenue (\$2.2 million), partially offset by lower gain on sale of carbon allowance futures (\$3.7 million) and transfers to the RSF (\$28.9 million).

Operating expenses were \$638.8 million higher than 2021. This was primarily due to higher purchased power expenses (\$369.6 million), amortization of pension and OPEB (\$126.9 million), production operating expenses (\$114.0 million), transmission and distribution maintenance expenses (\$23.3 million), depreciation expenses (\$8.9 million), transmission and distribution operating expenses (\$8.8 million), public good expenses (\$7.7 million), customer service and information expenses (\$4.5 million), and production maintenance expenses (\$2.8 million), partially offset by lower administrative and general expenses (\$30.4 million).

Non-Operating income increased by \$15.9 million primarily due to higher investment income (\$19.7 million), partially offset by unrealized holding losses (\$3.7 million), closeout of escrow account (\$2.8 million), higher fee based product costs (\$1.9 million), and loss on asset retirements (\$1.9 million).

Interest expense decreased \$7.0 million from 2021.

Year Ended December 31, 2021. For the year ended December 31, 2021, SMUD reported an increase in net position of \$347.3 million as compared to an increase of \$167.4 million for 2020.

Operating revenues were \$201.3 million higher than 2020. This was primarily due to higher sales to customers (\$70.1 million), sales of surplus gas (\$65.4 million), sales of surplus power (\$47.1 million),

transfers from the RSF (\$18.2 million), AB 32 revenue (\$17.9 million) and gain on sale of carbon allowance futures (\$3.1 million), partially offset by transfers to the RSF (\$13.4 million) and lower public good revenue (\$3.5 million).

Operating expenses were \$66.2 million higher than 2020. This was primarily due to higher production operating expenses (\$89.6 million), purchased power expenses (\$47.0 million), and depreciation expenses (\$37.8 million), partially offset by lower amortization of pension and OPEB (\$84.2 million), public good expenses (\$10.7 million), customer accounts expenses (\$6.8 million) and transmission and distribution maintenance expenses (\$5.5 million).

Non-Operating income increased by \$45.8 million primarily due to California Arrearage Payment Program funding (\$41.4 million), a settlement related to Rancho Seco damages (\$15.0 million), higher investment income (\$11.5 million), higher contributions in aid of construction (\$4.0 million), lower legal settlement costs (\$2.2 million), offset by dissolution of RBC CSCDA gas prepay contract (\$10.9 million), lower insurance proceeds (\$8.6 million), lower interest income (\$6.9 million), lower unrealized holding gains (\$4.0) and lower distributions from the JPAs (\$2.6 million).

Interest expense increased \$1.0 million from 2020.

Regulatory Assets. In accordance with Governmental Accounting Standards Board (“GASB”) No. 62, “Regulated Operations,” SMUD defers, as regulatory assets, certain types of expenditures. These assets are amortized and collected through future rates.

As of December 31, 2022, SMUD had a total of \$764.2 million recorded for regulatory assets. Regulatory assets associated with costs related to implementation of GASB No. 68, which requires SMUD to record a net pension liability was \$340.5 million and deferred outflows related to GASB No. 68 was \$86.6 million at December 31, 2022. Regulatory assets associated with costs related to implementation of GASB No. 75, which requires SMUD to record a net Other Post Employment Benefit (OPEB) liability was \$281.0 million and deferred outflows related to GASB No. 75 was \$19.2 million at December 31, 2022. Regulatory assets associated with Rancho Seco decommissioning costs totaled \$83.9 million at December 31, 2022. Nuclear fuel storage costs and non-radiological decommissioning costs have been collected in rates since 2009. For a complete description of these regulatory assets, see Note 8 (Regulatory Deferrals) to SMUD’s financial statements.

The Board has authorized the deferral of any charges or credits that result from the change in valuation of ineffective hedges that should be reported as Investment Revenue/Expense on the Statements of Revenues, Expenses and changes in net position. The Board’s resolution establishes that such charges or credits are not included in rates based on market value changes but are included in rates when the underlying transactions occur. Therefore, under GASB No. 62, “Regulated Operations,” any such changes are included in the Statement of Net Position as regulatory assets or liabilities. For a complete description of these derivative financial instruments, see Note 9 (Derivative Financial Instruments) to SMUD’s financial statements.

RANCHO SECO DECOMMISSIONING

Overview. The 913 MW Rancho Seco Nuclear Power Plant (“Rancho Seco”) began Nuclear Regulatory Commission (“NRC”) licensed operations in 1974. In June 1989, the electorate of SMUD voted against allowing SMUD to continue to operate Rancho Seco as a nuclear generating facility, and the plant was shut down. In 1991, SMUD submitted a report (the “Financial Assurance Plan”) providing required financial assurance to the NRC that SMUD will have sufficient funds available to pay for the cost of decommissioning. On March 17, 1992, the NRC granted SMUD a change from an operating to a

possession-only license for Rancho Seco that relieved SMUD from compliance with a number of NRC regulations applicable to operating nuclear power plants. SMUD also filed a proposed decommissioning plan with the NRC (the “Decommissioning Plan”), which was approved in March 1995.

After the decommissioning efforts began, no suitable disposal option was available to SMUD for the Class B and Class C low level radioactive waste generated during the plant decommissioning. With the used nuclear fuel stored onsite requiring oversight staff, SMUD opted to store the Class B and Class C radioactive waste in an existing interim onsite storage building until a suitable disposal option was available. In November 2007, the possession-only license for Rancho Seco was amended to update the Decommissioning Plan to terminate the possession-only license for the Class B and Class C waste in two phases. Phase I of the decommissioning was completed at the end of 2008. Following verification of the site conditions, SMUD submitted a request to the NRC to reduce the licensed facility from 2,480 acres to the interim onsite storage building and about one acre surrounding it. The request was approved by the NRC in September 2009. Phase II of decommissioning included the approximately two-acre interim storage building containing the Class B and Class C radioactive waste and surrounding area. In September 2013, SMUD entered into a contract with the operator of the low-level radioactive waste disposal facility located in Andrews, Texas. Shipment of the Class B and Class C radioactive waste for disposal was completed in November 2014. SMUD conducted additional clean-up activities and radiological surveys, which were followed by NRC confirmatory surveys. The results of these surveys demonstrated unit dose criteria well below NRC release criteria, and the NRC approved the Phase II area for unrestricted use. On September 21, 2017, SMUD formally requested the termination of the possession-only license. On August 31, 2018, the NRC officially terminated SMUD’s possession-only license for the remaining Class B and Class C waste at Rancho Seco.

As part of the Decommissioning Plan, the nuclear fuel and Greater Than Class C (“GTCC”) radioactive waste is being stored in a dry storage facility (the Independent Spent Fuel Storage Installation or “ISFSI”) constructed by SMUD, adjacent to the former reactor facility. The NRC has separately licensed this facility. The DOE, under the Nuclear Waste Policy Act of 1982, is responsible for permanent disposal of used nuclear fuel and GTCC radioactive waste. SMUD has a contract with the DOE for the removal and disposal of this waste. The DOE was to have a waste repository operating by 1998, but has experienced significant and ongoing delays. The Nuclear Waste Policy Act designates Yucca Mountain in Nevada as the final and exclusive repository for the nation’s used nuclear fuel. The DOE discontinued the Yucca Mountain license review activities in 2010, but after a court ordered the NRC to resume its review in 2013, the NRC published its final safety evaluation report in 2015. The final safety report, and the final environmental impact statement, concluded that the proposed repository would be safe and environmentally sound for one million years.

Nevertheless, seeking alternatives to Yucca Mountain, the Blue-Ribbon Commission on America’s Nuclear Future delivered its final report in January 2012 with several recommendations. The Department of Energy (the “DOE”) responded to the recommendations by issuing a report in January 2013 (Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste). Key to both documents is a focus on used fuel from decommissioned sites including Rancho Seco. The DOE report accepts most of the Blue-Ribbon Commission recommendations, and contains timelines for fuel management options which proposed removing the fuel from Rancho Seco as early as 2021. However, any progress on the strategies proposed by the DOE is dependent on legislative action by Congress. With no legislative action taken to date, the 2021 projected date for fuel removal slips year-for-year. Therefore, SMUD cannot determine at this time when the DOE will fulfill its contractual obligations to remove the nuclear fuel and GTCC waste from the Rancho Seco facility. In the meantime, SMUD continues to incur costs of approximately \$5 to \$6 million per year for storage of used nuclear fuel at the ISFSI. SMUD has filed a series of successful lawsuits against the federal government for recovery of past spent fuel costs, with recoveries to date from the DOE in excess of \$104 million. SMUD plans to continue pursuing cost

recovery claims to ensure it is reimbursed for all such costs in the future. The ISFSI will be decommissioned, and its license terminated after the fuel and GTCC is removed.

Financial Assurance Plan. In accordance with the Financial Assurance Plan, SMUD established and funded an external decommissioning trust fund currently held by Wells Fargo Bank (the “Decommissioning Trust Fund”). Pursuant to the Financial Assurance Plan, SMUD made the final deposit into the Decommissioning Trust Fund in 2008. Additional deposits are not expected but will be made if increased cost estimates or reduced fund interest earnings require it. In 2011, the NRC began requiring that SMUD demonstrate financial assurance for decommissioning the ISFSI as well as the former power facility, increasing the overall cost for decommissioning Rancho Seco. The estimated total cost for decommissioning the ISFSI was approximately \$6.5 million on December 31, 2022. The decommissioning cost estimate is required to be updated every three years. As of December 31, 2022, the balance of the Decommissioning Trust Fund was \$8.98 million, excluding unrealized gains and losses. Based on the current decommissioning cost estimate and the value of the fund, SMUD’s existing Decommissioning Trust Fund provides sufficient funds to complete decommissioning and terminate the ISFSI license.

In addition to these costs, SMUD also estimates that it would cost approximately \$13.1 million to restore the site to make it available for other SMUD uses with some major structures remaining intact. Site restoration is not a legal requirement. No site restoration is currently underway.

EMPLOYEE RELATIONS

SMUD has approximately 2,335 employees, most of whom are covered by a civil service system. SMUD is a contracting member of the California Public Employees’ Retirement System (“PERS”). Approximately 50% of SMUD’s work-force is represented as to wages, hours and other terms and conditions of employment, by one of three recognized employee organizations, the International Brotherhood of Electrical Workers (“IBEW”) Local 1245, the Organization of SMUD Employees (“OSE”), and the SMUD Public Safety Officers’ Association (“PSOA”). The remaining 50% of SMUD’s work-force, which includes managers, professional, administrative, supervisory, confidential and security staff, is unrepresented.

SMUD negotiated a four-year Memoranda of Understanding (“MOU”) with IBEW and the OSE, effective January 1, 2022, through December 31, 2025. Both contracts contain a no-strike/no-lockout clause effective during the life of the agreements. SMUD has an MOU with PSOA effective through December 31, 2026. SMUD has experienced only one labor interruption, which occurred in January 1980 that lasted four days.

RETIREMENT BENEFITS AND POST-EMPLOYMENT MEDICAL BENEFITS

Pension Plans

SMUD participates in PERS, an agent multiple-employer public employee defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. Benefit provisions and all other requirements are established by State statute and SMUD policies. The pension plan provides retirement benefits, survivor benefits, and death and disability benefits based upon employees’ years of credited service, age, and final compensation.

As of June 30, 2021, the last actuarial valuation date for SMUD’s plan within PERS, the market value of the SMUD plan assets was \$2.51 billion. The plan is 100.1% funded on a market value of assets

basis, an increase of 21.0% compared to the June 30, 2020 funded status based on the market value of assets.

As an employer, SMUD is required to contribute a percentage of payroll each year to PERS to fund SMUD's plan based on actuarial valuations performed by PERS. PERS collects the normal cost based on a percentage of payroll and the unfunded liability portion is based on a dollar amount. SMUD also makes partial contributions required of SMUD employees on their behalf and for their account. At the PERS fiscal year ended June 30, 2022, SMUD's required employer contribution rate for normal cost was 9.0% of payroll and the unfunded liability contribution was \$36.3 million. During 2022, SMUD contributed \$52.7 million to PERS (including SMUD's contributions to cover required employee contributions), and SMUD employees paid \$16.5 million for their share of the PERS contribution.

For the fiscal years ending June 30, 2023 and June 30, 2024, SMUD is required to contribute 8.9% and 9.6% of payroll for normal costs and \$22.4 million for fiscal year ending June 30, 2023 for the unfunded liability contribution. There is no estimated employer contribution to the unfunded liability for fiscal year ending June 30, 2024. Assuming no amendments to the plan and no liability gains or losses (which can have a significant impact), PERS has projected that SMUD will be required to contribute 9.5% of payroll to the plan for normal costs and no employer contribution for the unfunded liability for the fiscal year ending June 30, 2025, not including SMUD contributions to cover required employee contributions. The amount SMUD is required to contribute to PERS is expected to increase in the future. The actual amount of such increases will depend on a variety of factors, including but not limited to investment returns, actuarial methods and assumptions, experience and retirement benefit adjustments.

SMUD has the option to prepay an annual lump sum payment to PERS for the unfunded accrued liability portion only (not including SMUD contributions to cover required employee contributions). SMUD made an annual lump sum prepayment of \$35.1 million, and also voluntarily made an additional payment of \$56.3 million, for the unfunded accrued liability for the fiscal year ended June 30, 2022. SMUD also made an annual lump sum prepayment of \$19.5 million, and voluntarily made an additional payment of \$2.9 million for the unfunded accrued liability for the fiscal year ending June 30, 2023.

While SMUD has some ability to adjust the retirement benefits provided to its employees, PERS determines the actuarial methods and assumptions used with respect to assets administered by PERS (including the SMUD plan assets) and makes the investment decisions with respect to such assets. For a description of such actuarial methods and assumptions (including the smoothing conventions used by PERS when setting employer contribution rates) and investments, see the comprehensive annual financial report of PERS (SMUD's plan is part of the Public Employees' Retirement Fund of PERS) available on its website at www.calpers.ca.gov. SMUD cannot guarantee the accuracy of such information and neither the comprehensive annual financial report of PERS nor any other information contained on the PERS website is incorporated by reference in or part of this Official Statement. Actuarial assessments are "forward-looking" information that reflect the judgment of the fiduciaries of the pension plans, and are based upon a variety of assumptions, one or more of which may prove to be inaccurate or be changed in the future. Actuarial assessments will change with the future experience of the pension plans.

GASB issued statement No. 68 "Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27" ("GASB No. 68"). The primary objective of GASB No. 68 is to improve accounting and financial reporting by state and local governments for pensions. Under GASB No. 68, SMUD is required to report the net pension asset or net pension liability (i.e., the difference between the total pension liability and the pension plan's net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. GASB No. 68 separates financial reporting from funding requirements for pension plans. The net pension

liability as of December 31, 2022 is \$235.5 million and the net pension asset as of December 31, 2021 is \$27.7 million.

SMUD provides its employees with two cash deferred compensation plans: one pursuant to Internal Revenue Code (“IRC”) Section 401(k) (the “401(k) Plan”) and one pursuant to IRC Section 457 (the “457 Plan” and collectively, the “Plans”). The Plans are contributory plans in which SMUD’s employees contribute the funds. Each of SMUD’s eligible full-time or permanent part-time employees may participate in either or both Plans, and amounts contributed by employees are vested immediately. Such funds are held by a trustee in trust for the employees upon retirement from SMUD service and, accordingly, are not subject to the general claims of SMUD’s creditors. SMUD makes annual contributions to the 401(k) Plan on behalf of certain employees pursuant to a memorandum of understanding with both of its collective bargaining units. SMUD matches non-represented employee contributions to the 401(k) Plan up to a set amount. SMUD also makes limited discretionary contributions to non-represented employees hired after January 1, 2013, which contributions fully vest after five years. Prior to 2022, SMUD did not match employee contributions, nor make contributions on behalf of its employees to the 457 Plan. Beginning in 2022, SMUD makes annual contributions to the 457 Plan on behalf of certain employees and matches employee contributions up to a set amount pursuant to a memorandum of understanding with one of its collective bargaining units. SMUD made contributions to both Plans of \$7.0 million in 2022 and to the 401(k) Plan of \$6.1 million in 2021. Participating employees made contributions into both Plans totaling \$32.4 million in 2022 and \$30.6 million in 2021.

Other Post-Employment Benefits

SMUD provides post-employment healthcare benefits, in accordance with SMUD policy and negotiated agreements with employee representation groups in a single employer defined benefit plan, to all employees who retire from SMUD, and their dependents. SMUD also provides post-employment healthcare benefits to covered employees who are eligible for disability retirement. SMUD contributes the full cost of coverage for retirees hired before January 1, 1991, and a portion of the cost based on credited years of service for retirees hired after January 1, 1991. SMUD also contributes a portion of the costs of coverage for these retirees’ dependents. Retirees are required to contribute the portion that is not paid by SMUD. The benefits, benefit levels, retiree contributions and employer contributions are governed by SMUD and can be amended by SMUD through its personnel manual and union contracts.

SMUD’s post-employment health care benefits are funded through the PERS California Employers’ Retiree Benefit Trust (“CERBT”), an agent multiple-employer plan. The funding of a plan occurs when the following events take place: the employer makes payments of benefits directly to or on behalf of a retiree or beneficiary; the employer makes premium payments to an insurer; or the employer irrevocably transfers assets to a trust or other third party acting in the role of trustee, where the plan assets are dedicated to the sole purpose of the payments of the plan benefits, and creditors of the government do not have access to those assets.

SMUD has elected to contribute the normal costs to the CERBT but annually receive reimbursement for cash benefit payments from the CERBT. In 2023, SMUD’s contribution for the normal costs to CERBT is \$8.6 million. In 2022 and 2021, SMUD decided to forgo making a contribution for the normal costs to the CERBT because there was a net OPEB asset at December 31, 2021 and December 31, 2020. SMUD can elect to make additional contributions to the trust. During 2022 and 2021, SMUD made healthcare benefit contributions by paying actual medical costs of \$24.5 million and \$24.1 million, respectively. During 2022 and 2021, SMUD received a \$23.3 million reimbursement for cash benefit payments from the CERBT each year.

At June 30, 2022 and 2021, SMUD estimated that the actuarially determined accumulated post-employment benefit obligation was approximately \$381.7 and \$398.2 million, respectively. At June 30, 2022 and 2021, the plan was 97.9% and 113.1% funded, respectively.

SMUD’s actuary uses PERS economic and other assumptions as the basis for the calculation of the post-employment benefit obligation. The actual accumulated post-employment benefit obligation will vary substantially if such PERS assumptions, such as interest rate and life expectancy, among others, prove to be inaccurate or different than SMUD’s actual experience. Although SMUD believes that such assumptions and estimates are reasonable, no assurance can be given that any such assumptions will prove to be accurate, or that SMUD’s actual accumulated post-employment benefit obligation will not materially exceed its estimates. Additional information is available in Note 15 (Other Postemployment Benefits) and “Required Supplementary Information” to SMUD’s consolidated financial statements.

GASB previously issued SGAS No. 75 “Accounting and Financial Reporting for Postemployment Benefits Other than Pensions”. The primary objective of GASB No. 75 is to improve accounting and financial reporting by state and local governments for post-employment benefits other than pensions (“OPEB”). Under GASB No. 75, SMUD is required to report the net OPEB asset or net OPEB liability (i.e., the difference between the total OPEB liability and the OPEB plan’s net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. The net OPEB liability as of December 31, 2022 is \$6.8 million and the net OPEB asset as of December 31, 2021 is \$57.5 million.

CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS

Estimated Capital Requirements

SMUD has a projected capital requirement of approximately \$2.70 billion for the period 2023 through 2027 as shown in the table below. Approximately 60% of this requirement is anticipated to be funded with internally generated funds and cash on hand.

Special projects include costs relating to construction of large substations and the potential construction of Solano Phase 4. The Estimated Capital Requirements table below includes \$207 million for Solano Phase 4. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Solano 4 Project.”

ESTIMATED CAPITAL REQUIREMENTS (Dollars in Thousands)

	Service Area and Other System Improvements Including Distribution System	Improvements to Existing Generation Plant	General Plant	Special Projects	Total Capital Requirements
2023	\$150,334	\$57,763	\$78,675	\$207,427	\$494,199
2024	195,581	40,608	97,225	216,229	549,643
2025	247,528	100,303	107,766	94,651	550,248
2026	247,528	100,303	107,766	94,651	550,248
2027	247,528	100,303	107,766	94,651	550,248

Outstanding Indebtedness

General. SMUD typically finances its capital requirements through the sale of revenue bonds, the sale of commercial paper, from draws on its Revolving Credit Facility (as defined below) and from internally generated funds. With the recent passage of the Inflation Reduction Act and the Infrastructure Investment and Jobs Act SMUD is monitoring and exploring new methods of financing, including those afforded under these two programs that provide not-for-profit public power utilities with direct federal incentive payments.

SMUD's Electric Revenue Bonds (the "Senior Bonds") are issued pursuant to Resolution No. 6649 (the "Senior Resolution") adopted in 1971, as amended and supplemented (the "Senior Resolution"). As of May 1, 2023, SMUD had Senior Bonds in the aggregate principal amount of \$1,841,715,000 outstanding. [If the plan of finance described in the forepart of this Official Statement is implemented in whole, Senior Bonds in the aggregate principal amount of \$[_____] are expected to be outstanding under the Senior Resolution.] See "PLAN OF FINANCE" in the forepart of this Official Statement. The Senior Bonds are payable solely from the Net Revenues of SMUD's Electric System. The Senior Bonds are subordinate in right of payment to the prior payment of "Maintenance and Operation Costs" and "Energy Payments" as defined in the Master Resolution, including payments by SMUD to TANC under PA3, payments by SMUD under power purchase agreements related to the Authorities and payments by SMUD to NCGA and NCEA under their respective gas supply contracts.

SMUD's Subordinated Electric Revenue Bonds (the "Subordinated Bonds") are issued pursuant to Resolution No. 85-11-1 of SMUD, adopted on November 7, 1985, as amended and supplemented (the "Subordinate Resolution"). As of May 1, 2023, SMUD had Subordinated Bonds in the aggregate principal amount of \$200,000,000 outstanding. [If the plan of finance described in the forepart of this Official Statement is implemented in whole, Subordinate Bonds in the aggregate principal amount of \$[_____] are expected to be outstanding under the Subordinate Resolution.] The Subordinated Bonds are payable solely from the Net Subordinated Revenues of SMUD's Electric System. The Subordinated Bonds are subordinate in right of payment to the prior payment of principal of and interest on the Senior Bonds.

SMUD issues commercial paper notes (the "Notes") from time to time. As of May 1, 2023, SMUD's Notes were outstanding in the aggregate principal amount of \$200,000,000. Currently, Notes in the aggregate principal amount of \$300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD's obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds. Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February and August of 2025. SMUD expects to pay \$200,000,000 of the outstanding principal amount of the Notes with proceeds of the [2023 Bonds] (as defined in the forepart of the Official Statement). See "PLAN OF FINANCE" in the forepart of the Official Statement.

SMUD also entered into a revolving credit agreement with a commercial bank and issued its taxable and tax-exempt revolving notes thereunder (collectively, the "Revolving Credit Facility") in February 2022. As of May 1, 2023, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to \$100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD's payment obligations under the Revolving Credit Facility are payable solely from available

revenues of SMUD's Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds. The current term of the Revolving Credit Facility expires in February 2026.

Joint Powers Authorities. SMUD has entered into long-term take-or-pay power purchase agreements with SFA relating to the Local Gas-Fired Plants. Under such agreements, SMUD has exclusive control of the dispatch of all five of the Local Gas-Fired Plants and takes all of the power produced by the Local Gas-Fired Plants. See "POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants." The Authorities are each treated as component units of SMUD for accounting purposes. Only SFA has outstanding debt, which relates solely to the Cosumnes Power Plant and is payable solely from capacity payments made by SMUD under the related power purchase agreement. As of May 1, 2023, bonds issued by SFA to finance the Cosumnes Power Plant were outstanding in the aggregate principal amount of \$89,735,000. SMUD's payments under the power purchase agreements relating to the Local Gas-Fired Plants are payable from revenues of SMUD's Electric System prior to the payment of principal of and interest on the Senior Bonds and Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and Subordinate Resolution.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Gas Authority No. 1 ("NCGA"). NCGA is treated as a component unit of SMUD for accounting purposes. NCGA issued \$757,055,000 in bonds in May 2007 for the purpose of paying Morgan Stanley Capital Group in advance for natural gas to be delivered to NCGA and then sold to SMUD pursuant to a long-term purchase contract. SMUD's obligation under the purchase contract is limited to payment for gas supplies delivered by NCGA. SMUD's payments under the purchase contract are payable from revenues of SMUD's Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCGA bonds. As of May 1, 2023, related bonds in the aggregate principal amount of \$142,935,000 remain outstanding.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Energy Authority ("NCEA"). NCEA is treated as a component unit of SMUD for accounting purposes. NCEA issued \$539,615,000 in bonds in December 2018 for the purpose of paying J. Aron & Company LLC in advance for natural gas or electricity to be delivered to NCEA and then sold to SMUD pursuant to a long-term purchase contract. SMUD's obligation under the purchase contract is limited to payment for gas or electricity supplies delivered by NCEA. SMUD's payments under the purchase contract are payable from revenues of SMUD's Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either "Maintenance and Operation Costs" or "Energy Payments" under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCEA bonds. As of May 1, 2023, related bonds in the aggregate principal amount of \$539,615,000 remain outstanding.

Interest Rate Swap Agreements. SMUD has two interest rate swap agreements relating to previously or currently outstanding Subordinated Bonds and two forward starting interest rate swap agreements relating to potential refunding bonds to be issued in the future, as shown in the following table. For more information, see Note 9 (Derivative Financial Instruments) to SMUD's consolidated financial statements.

<u>Effective Date</u>	<u>Termination Date</u>	<u>SMUD Pays</u>		<u>SMUD Receives</u>	<u>Notional Amount (000's)</u>	<u>Counterparty</u>
7/2/1997	7/1/2024	Floating	SIFMA	5.154%	\$38,165	J Aron & Company LLC
7/15/2003	8/15/2028	Fixed	2.894%	63% of 1M LIBOR	68,450	Morgan Stanley Capital Services, Inc.
07/12/2023	08/15/2041	Fixed	0.718%	70% of 1M LIBOR	132,020	Barclays Bank
07/12/2023	08/15/2033	Fixed	0.554%	70% of 1M LIBOR	75,680	Barclays Bank

The obligations of SMUD under the swap agreements are not secured by a pledge of revenues of SMUD's electric system or any other property of SMUD. SMUD does not currently have any collateral posting requirements with respect to the interest rate swap agreements, but SMUD may be required to post collateral under certain circumstances. [In connection with the plan of finance described in the forepart of this Official Statement, SMUD expects to terminate the swap with Barclays Bank with a notional amount of \$75,680,000 that would otherwise become effective on July 12, 2023]. See "PLAN OF FINANCE" in the forepart of this Official Statement.

Build America Bonds Subsidy Payments. SMUD's Electric Revenue Bonds, 2009 Series V (the "2009 Series V Bonds") and Electric Revenue Bonds, 2010 Series W (the "2010 Series W Bonds") were issued as "Build America Bonds" under the provisions of the American Recovery and Reinvestment Act of 2009. At the time the 2009 Series V Bonds and 2010 Series W Bonds were issued, SMUD expected to receive an annual cash subsidy payment from the United States Treasury equal to 35% of the interest payable on the 2009 Series V Bonds and the 2010 Series W Bonds. However, as a result of the federal budget process, many payments from the federal government, including Build America Bonds subsidy payments, have been reduced. Absent the federal budget reductions, the aggregate annual cash subsidy payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds would be approximately \$9.8 million. With the current federal budget reductions, SMUD has typically been receiving aggregate annual cash subsidy payments with respect to the 2009 Series V Bonds and the 2010 Series W Bonds of approximately \$9.2 million. It is possible that future federal budget actions could further reduce, or eliminate entirely, the annual cash subsidy payments with respect to Build America Bonds, including the annual cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds. SMUD cannot predict the likelihood of the further reduction or elimination of the Build America Bonds subsidy payments. A significant reduction or elimination of the cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds or the 2010 Series W Bonds could be material.

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Debt Service Requirements. The following table sets forth SMUD’s debt service requirements with respect to SMUD’s Senior Bonds and Subordinated Bonds.

DEBT SERVICE REQUIREMENTS[TO BE UPDATED]⁽¹⁾

Calendar Year	Senior Bonds Debt Service⁽²⁾	Subordinated Bonds Debt Service⁽³⁾	Total Debt Service
2022	\$ 198,841,641	\$ 10,000,000	\$ 208,841,641
2023	208,076,945	10,861,111	218,938,056
2024	176,548,637	7,483,333	184,031,970
2025	177,270,712	8,833,333	186,104,045
2026	177,369,062	5,500,000	182,869,062
2027	177,458,312	6,000,000	183,458,312
2028	177,568,563	6,000,000	183,568,563
2029	126,192,937	6,000,000	132,192,937
2030	136,265,941	6,000,000	142,265,941
2031	141,875,082	6,000,000	147,875,082
2032	141,716,845	6,000,000	147,716,845
2033	141,576,102	6,000,000	147,576,102
2034	144,261,606	6,000,000	150,261,606
2035	144,110,773	6,000,000	150,110,773
2036	143,962,001	6,000,000	149,962,001
2037	83,681,613	6,000,000	89,681,613
2038	83,528,863	6,000,000	89,528,863
2039	80,375,800	6,000,000	86,375,800
2040	80,382,550	6,000,000	86,382,550
2041	85,735,800	6,000,000	91,735,800
2042	31,422,350	28,490,000	59,912,350
2043	31,214,150	28,490,300	59,704,450
2044	31,008,750	28,490,350	59,499,100
2045	30,799,950	28,494,550	59,294,500
2046	25,391,750	28,492,150	53,883,900
2047	25,392,000	28,492,700	53,884,700
2048	25,392,500	28,490,450	53,882,950
2049	25,390,750	28,489,800	53,880,550
2050	25,394,250	-	25,394,250
Total	\$3,078,206,235	\$360,608,077	\$3,438,814,312

(1) Does not include outstanding bonds issued by the Authorities for the Local Gas-Fired Plants. Does not include bonds issued by NCGA, NCEA or SMUD’s portion of bonds issued by TANC. Payments by SMUD which are used by the Authorities, NCGA, NCEA, and TANC to pay debt service on such bonds constitute either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and the Subordinate Resolution.

(2) Includes debt service for the [] Bonds and excludes debt service for the [Refunded Bonds]. Debt service for all Senior Bonds other than the [] Bonds calculated as of December 31, 2022. Debt service for the [] Bonds calculated assuming the [] Bonds are issued on []. Debt service is not reduced by the amount of any subsidy that SMUD currently expects to receive in connection with the 2009 Series V Bonds and 2010 Series W Bonds.

(3) [As of December 31, 2021. Based on an assumed interest rate of 3% per annum following (i) the initial scheduled Mandatory Purchase Date of October 17, 2023 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series A and (ii) the initial scheduled Mandatory Purchase Date of October 15, 2025 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series B.]

Note: Amounts may not add due to rounding.

INSURANCE

SMUD maintains a comprehensive property/casualty insurance program designed to protect against catastrophic losses that would have an adverse effect on its financial position or operational capabilities. Insurance programs are continuously reviewed and modified when construction, operational exposures, or developments in the insurance industry so warrant. Long term relationships with a variety of insurers minimize SMUD's susceptibility to the effects of market cycles. SMUD budgets reserves to meet potential insurance deductibles and self-insured liability claims.

SMUD safeguards assets with all-risk property and boiler/machinery insurance with limits of \$800 million per occurrence for physical damage and business interruption combined. Various coverage sublimits and deductibles apply to losses arising from certain perils, such as business interruption, earthquake, or flood, respectively. Liability insurance is in effect to defend and indemnify SMUD against third party claims, including general, automobile and sudden and accidental pollution claims with policy limits of \$140 million, and wildfire coverage with policy limits of \$250 million, all of which include a variety of self-insured retentions.

Nuclear property and liability insurance policies are maintained in accordance with the NRC's requirements for decommissioned nuclear plants that maintain dry storage of spent fuel on-site. This includes \$100 million in first party property damage and decontamination, \$100 million for nuclear liability arising from accidents on-site, \$200 million for supplier's and transporter's nuclear liability, and \$300 million for nuclear worker liability. SMUD is exposed to possible retrospective assessments for nuclear property events occurring at other nuclear facilities in the United States capped at ten times SMUD's annual nuclear property premium (currently the maximum retrospective assessment is approximately \$1,000,000).

Other types of insurance include non-owned aircraft liability, workers' compensation, crime, cyber security, fidelity, fiduciary liability, directors' and officers' liability, professional errors and omissions, transportation, and builder's risk for major facilities under construction.

LEGAL PROCEEDINGS

SMUD is a party to numerous actions arising out of the conduct of its business and affairs, some of which are discussed below. SMUD believes that any losses or adverse financial results it may suffer in these current actions, to the extent not covered by insurance, would not, in the aggregate, have an adverse material impact on SMUD, its business and affairs, the results of its operations, financial position or liquidity.

Environmental Litigation

SMUD was one of many potentially responsible parties that had been named in a number of actions relating to environmental claims and/or complaints. SMUD has resolved these environmental claims and/or complaints and entered into settlement agreements and/or consent orders. These settlement agreements and consent orders have statutory reopener provisions which allow regulatory agencies to seek additional funds for environmental remediation under certain limited circumstances. While SMUD believes it is unlikely that any of the prior settlements or consent orders will be reopened, the possibility exists. If any of the settlements or consent orders were to be reopened, SMUD management does not believe that the outcome will have a material adverse impact on SMUD's financial position, liquidity or results of operations.

Claim for Accidental Death

In February 2020, SMUD received a claim alleging an employee of a gutter company died after he accidentally came into contact with a SMUD electrical line during an installation. The claim is for approximately \$43 million. SMUD concluded the electrical lines at the site of the accident exceeded required clearances and there is no basis for the claim against SMUD. SMUD management believes that SMUD has no potential liability in this matter and that any costs ultimately borne by SMUD will not have a material adverse impact on SMUD's financial position, liquidity or results of operations.

Proposition 26 Lawsuit

Two SMUD customers jointly filed a complaint against SMUD in October 2019, and subsequently one of the plaintiffs removed themselves from the complaint. The complaint states that SMUD violated Proposition 26 (see "DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Proposition 26" for a description of Proposition 26) when SMUD's Board on June 24, 2019 adopted rate increases for 2020 and 2021. The plaintiff contends the rate increases do not reflect SMUD's reasonable cost of service because they include a 9.2% scalar that SMUD applied to its TOD residential rate restructure in the 2017 rate process which SMUD's Board adopted at that time. Therefore, the plaintiff contends SMUD's 2020 and 2021 rates should be decreased by this scalar amount because the scalar exceeded SMUD's cost of service, and refunded to SMUD customers. Because SMUD has a strong evidentiary record supporting the Board's rate decisions in 2017 and 2019, and views the lawsuit as having little merit, SMUD anticipates the court will rule in SMUD's favor. The plaintiff has requested to amend the complaint, which has delayed the court's proceeding until the amended complaint is filed. While SMUD believes the court will rule in its favor, SMUD is unable to predict the outcome of the litigation or, if or to the extent SMUD ultimately is not successful in the litigation, what remedies against SMUD may be available. SMUD management believes that if SMUD is not successful in the litigation, and to the extent the outcome would have a material adverse impact on SMUD's financial position, liquidity, or results of operations, the Board would make appropriate rate modifications based on an evidentiary record consistent with guidance from a judicial decision in the case.

Other Litigation Matters

Currently, SMUD is party to various claims, legal actions and complaints relating to its operations, including but not limited to: property damage and personal injury, contract disputes, torts, and employment matters. SMUD management believes that the ultimate resolution of these matters will not have a material adverse effect on SMUD's financial position, liquidity or results of operation.

FERC Administrative Proceedings

SMUD is involved in a number of FERC administrative proceedings related to the operation of wholesale energy markets, regional transmission planning, gas transportation and NERC reliability standards. These proceedings generally fall into the following categories: (i) filings initiated by the CAISO (or other market participants) to adopt/modify the CAISO Tariff and/or establish market design and behavior rules; (ii) filings initiated by existing transmission owners (i.e., PG&E and the other IOUs) to pass-through costs to their existing wholesale transmission customers; (iii) filings initiated by FERC on market participants to establish market design and behavior rules or investigate market behavior by certain market participants; (iv) filings initiated by transmission owners under their transmission owner tariffs to establish a regional transmission planning process; (v) filings initiated by providers of firm gas transportation services under the Natural Gas Act; and (vi) filings initiated by NERC to develop reliability standards applicable to owners, users, and operators of the bulk electric system. In addition, SMUD is an active participant in other FERC administrative proceedings, including those related to reliability, variable

resource integration and the changing resource mix, and transmission planning and cost allocation. SMUD management believes that determinations of these FERC proceedings will not have a material adverse effect on SMUD's financial position, liquidity or results of operations.

CPUC Administrative Proceedings

Periodically, PG&E seeks to update its gas transmission and storage ("GT&S") revenue requirements and rate designs. These applications are litigated at the CPUC and affect SMUD through several tariff rates SMUD pays to move natural gas along PG&E's backbone transmission lines. In the 2019 GT&S rate case (the "2019 GT&S Case"), the CPUC affirmed the application in GT&S rates of cost causation principles to prevent excessive and unreasonable costs being shifted to electric generator backbone customers like SMUD, either through proposed changes in PG&E's natural gas storage strategy or through cost shifts within the electric generator customer class.

PG&E filed its 2023 General Rate Case ("GRC") in June 2021 which includes its gas transmission and storage revenue requirements. In September 2021, PG&E filed an application for approval of its Gas Cost Allocation and Rate Design Proposals ("CARD"). SMUD is actively participating in PG&E's GRC and CARD proceedings to ensure that costs are fairly allocated to non-core customers, including electric generator backbone customers. Separately, SMUD continues to participate and monitor a proceeding at the CPUC concerning long-term gas system planning. At this point in these proceedings, SMUD management does not anticipate that the ultimate resolution of such cases will have a material adverse effect on SMUD's financial position, liquidity, or results of operation.

DEVELOPMENTS IN THE ENERGY SECTOR

Electric Market Deregulation

In 1996, the State partially deregulated its electric energy market and the CAISO was established in 1998. Since the CAISO's formation, the State has experienced episodes of higher and more volatile prices for natural gas and wholesale electricity. In reaction to such conditions, SMUD made significant changes to its business strategy to mitigate the impacts of the more volatile and unpredictable energy markets. Volatility in energy prices in the State are always a potential risk due to a variety of factors which affect both the supply and demand for electricity in the western United States. These factors include, but are not limited to, the implementation of the CAISO market design changes, insufficient generation resources, the increase in intermittent renewable energy resources, natural gas price volatility, fuel costs and availability, weather and natural disasters, transmission constraints and levels of hydroelectric generation within the region. While SMUD has taken a number of steps to mitigate its exposure to price volatility associated with these factors, this price volatility under extreme conditions may contribute to greater volatility in SMUD's net revenues from the purchase and sale of electric energy and, therefore, could materially adversely affect the financial condition and liquidity of SMUD. For a discussion of SMUD's current resource planning activities and risk management strategies, see "BUSINESS STRATEGY" above.

Cybersecurity

Cybersecurity continues to be a top priority for SMUD. Attacks or threats directed at critical electric or energy sector operations could damage or cause the shut-down of generation, transmission or distribution assets that are essential to SMUD's ability to serve its customers, cause operational malfunctions and outages affecting SMUD's electric system, and result in costly recovery and remediation efforts. The costs of security measures or of remedying breaches could be material.

SMUD participates in sharing and receiving information about cyber security threats in real-time through the Electricity Information Sharing and Analysis Center (“E-ISAC”), the central hub for such data to actively manage risk related to potential cyber intrusion. SMUD also participates in NERC’s development of mandatory, enforceable cyber security standards to address vulnerabilities in electric utility systems. SMUD also adopts voluntary measures suggested as best practices by the National Institute of Standards and Technology (“NIST”) in its national framework.

SMUD’s prudent response to this ever-changing threat requires constant monitoring and frequent updates to implement new regulatory requirements as they are developed. SMUD manages risk related to frequently changing regulatory requirements by participating in the development of standards at NERC and NIST and through active engagement in the cyber security policy dialogue in Congress.

Physical Security

Physical security is a critical concern for electric utilities as they seek to protect their infrastructure from a range of threats. The electric utility infrastructure is complex and consists of multiple components, such as power plants, substations, transmission and distribution lines, and other facilities. SMUD employs a dedicated physical security team that is deployed 24/7 and allows SMUD to respond to emergent events in a safe, coordinated, efficient, and cohesive manner, protecting the lives of its employees, customers, community, properties and assets. SMUD has policies, processes and procedures in place that outline the access controls and restrictions for its properties. SMUD restricts access based on need as it determines, while adhering to applicable laws, regulations and standards such as NERC Reliability Standards and NRC regulations. SMUD also maintains a Utility Security Plan adopted by the Board representing SMUD’s compliance with the CPUC’s Safety and Enforcement Divisions six-step security plan process described in CPUC Decision 19-01-018.

During times of elevated, imminent threats, safety and/or security concerns, SMUD’s Security Operations team, under the direction of the Chief Financial Officer or delegate, reserves the right to deploy additional security measures, controls, and further restrict or limit access to its properties to increase its security posture.

SMUD operates a 24/7 security operations center which monitors and coordinates responses to situations reported by internal and external stakeholders, or which are detected by SMUD’s security technology. The technology includes access control, video surveillance, and various types of intrusion detection solutions. The security operations center is a central hub for initial contact for physical security calls from employees of suspicious events and initiates incident responses as needed.

Federal Legislation and Regulatory Proceedings

Energy Policy Act of 2005. On August 8, 2005, the Energy Policy Act of 2005 (the “EPAAct of 2005”) was signed into law. The law includes a number of energy-related provisions, including among other things limited FERC jurisdiction over interstate transmission assets of municipal utilities, cooperatives and federal utilities to order these entities to provide transmission services on rates and terms comparable to those the entities charge and provide to themselves; the grant of authority to FERC to establish and certify an electric reliability organization to develop and enforce reliability standards for users of the bulk power transmission system; and prohibitions of certain market practices including the provision of false information and related expansion of FERC civil and criminal penalty authority. So far, the most visible impact of the EPAAct of 2005 on SMUD has been the development of mandatory federal reliability standards.

Federal Regulation of Transmission Access. The Energy Policy Act of 1992 (the “Energy Policy Act”) made fundamental changes in the federal regulation of the electric utility industry, particularly in the area of transmission access. The Energy Policy Act provided FERC with the authority to require a transmitting utility to provide transmission services at rates, charges, terms and conditions set by FERC. The purpose of these changes, in part, was to bring about increased competition in the electric utility industry. Under the Energy Policy Act, electric utilities owned by municipalities and other public agencies which own or operate electric power transmission facilities which are used for the sale of electric energy at wholesale are “transmitting utilities” subject to the requirements of the Energy Policy Act.

Since the Energy Policy Act, FERC has adopted a series of rules to implement competitive open access to transmission facilities and regional transmission planning. Order No. 888, issued in 1996, requires the provision of open access transmission services on a nondiscriminatory basis by all “jurisdictional utilities” (which, by definition, does not include municipal entities like SMUD) by requiring all such utilities to file OATTs. Order No. 888 also requires “nonjurisdictional utilities” (which, by definition, does include SMUD) that purchase transmission services from a jurisdictional utility under an open access tariff and that owns or controls transmission facilities to provide open access service to the jurisdictional utility under terms that are comparable to the service that the nonjurisdictional utility provides itself. Section 211A of the EAct of 2005 authorizes, but does not require, FERC to order unregulated transmission utilities to provide transmission services, including rates and terms and conditions, that are comparable to those under which the unregulated transmitting utility provides transmission services to itself that are not unduly discriminatory or preferential.

In Order 890, issued in 2007, FERC stated that it will implement its authority under Section 211A on a case-by-case basis and retain the current reciprocity provisions.

In 2011, FERC issued Order 1000, which among other things requires public utility (jurisdictional) transmission providers to participate in a regional transmission planning process that produces a regional transmission plan and that incorporates a regional and inter-regional cost allocation methodology. Similar to Order 890, FERC states that it will implement its authority under Section 211A on a case-by-case basis. However, in Order 1000, FERC appears to expand upon the current reciprocity provisions and states that it has the authority to allocate costs to beneficiaries of services provided by specific transmission facilities even in the absence of a contractual relationship between the owner of the transmission facilities and the identified beneficiary.

SMUD, individually, and through the Large Public Power Council (“LPPC”), appealed Order 1000, but in 2014 the D.C. Circuit Court of Appeals rejected all of the arguments raised on appeal, upholding the entirety of Order 1000.

The jurisdictional members of WestConnect filed their proposed regional planning process and cost allocation methodology through a series of compliance filings at FERC. FERC accepted binding cost allocation for jurisdictional transmission providers of WestConnect and mandated that non-jurisdictional transmission providers (such as SMUD) identified as beneficiaries of a project have the ability to not accept the cost allocation. WestConnect’s Order 1000 planning process began with the 2016-2017 planning cycle.

However, in response to FERC’s WestConnect orders on compliance, El Paso Electric Company (“El Paso”), a jurisdictional transmission provider, petitioned to the Court of Appeals for the 5th Circuit. El Paso contends that FERC’s WestConnect orders violate Order 1000’s cost causation principle because WestConnect’s binding cost allocation applies only to the jurisdictional transmission providers and thus forces jurisdictional transmission providers to subsidize projects benefitting non-jurisdictional transmission providers that opt-out of projects. The non-jurisdictional transmission providers agreed on a settlement with the jurisdictional transmission providers to resolve the matters on appeal in the 5th Circuit, but FERC

ultimately did not accept the settlement. The court scheduled briefings and oral argument for the case, which took place April 3, 2023. A court decision is expected sometime later in 2023. In the meantime, SMUD continues to participate in the WestConnect process.

SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD's electric system or the electric industry generally. However, WestConnect has conducted planning cycles under its Order 1000 planning process and has not identified any project eligible for cost allocation. SMUD will continue to take any action necessary, including withdrawing from a cost allocation determination and engaging in FERC proceedings, to ensure that it is not required to pay for transmission costs in the absence of an agreement or service relationship.

Of note, on April 21, 2022, FERC issued a Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection (the "NOPR"). The NOPR seeks input on proposals that would impact the Order 1000 planning and cost allocation process. SMUD has been engaged in the proceeding, providing input and helping draft comments with trade organizations, including LPPC. FERC has not issued any subsequent order. SMUD will continue to monitor and be engaged in any developments at FERC that impact the Order 1000 process and its participation in WestConnect.

NERC Reliability Standards. The EAct of 2005 required FERC to certify an electric reliability organization ("ERO") to develop mandatory and enforceable reliability standards, subject to FERC review and approval. On February 3, 2006, FERC issued Order 672, which certified NERC as the ERO. Many reliability standards have since been approved by FERC, including those aimed at protecting the bulk electric system from physical and cyber threats.

The ERO or the regional entities, such as WECC, may enforce the reliability standards, subject to FERC oversight or FERC may independently enforce reliability standards. Potential monetary sanctions include fines of up to \$1,496,035 per violation per day. Order 693 provides ERO and regional entities with the discretion necessary to assess penalties for such violations, while also having discretion to calculate a penalty without collecting the penalty if circumstances warrant.

Anti-Market Manipulation Rules. EAct of 2005 gave FERC the authority to issue rules to prevent market manipulation in jurisdictional wholesale power and gas markets, and in jurisdictional transmission and transportation services. These anti-market manipulation rules apply to non-jurisdictional entities such as SMUD. Further, EAct of 2005 provided FERC civil penalty authority, which the Commission has stated that it will exercise carefully by assuring that its market manipulation rules are clear.

Greenhouse Gas Emissions. The United States Environmental Protection Agency (the "EPA") has taken steps to regulate GHG emissions under existing law. In 2007, the U.S. Supreme Court held that the Clean Air Act ("CAA") directed EPA to regulate GHG emissions from new motor vehicles if it judged that such emissions contribute to climate change. In 2009, EPA finalized an "Endangerment Finding" under the CAA, declaring that six identified GHGs – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride – cause global warming, and that global warming endangers public health and welfare. Subsequently, EPA promulgated GHG standards for passenger cars and light-duty trucks (the so-called "Tailpipe Rule"). Although that rulemaking was later withdrawn by a different administration, prompting litigation and re-proposal of the standards that has only recently been finalized, the original promulgation of the Tailpipe Rule required EPA to also address emissions of the same pollutants from other sources, namely, the electric sector.

In 2014, EPA issued a proposed rule under section 111(d) of the CAA called the Clean Power Plan (the "CPP") that projected power sector emissions reductions of 30% below 2005 levels by 2030. The

proposed CPP would have established a rate-based emissions goal for each state, providing states the responsibility to develop a State Implementation Plan (“SIP”) describing how each will meet the goal assigned by EPA using the “Best System of Emissions Reduction” (“BSER”) established by EPA. The BSER under the CPP featured a suite of emissions reduction measures including fuel switching, emissions trading, and other measures. Significantly for the State and its regulated entities, the proposed CPP included a “state measures” plan that allowed for continued operation of successful state programs that achieve CPP goals. The rule was finalized in October 2015.

In November 2015, 27 states and numerous corporations challenged the CPP in court, alleging that EPA had exceeded its authority under the CAA. The U.S. Supreme Court stayed implementation of the CPP pending disposition of the petitions for review in the D.C. Circuit and any subsequent review by the Supreme Court. The D.C. Circuit Court of Appeals held oral arguments on the petitioner’s claims, but before the court issued a decision, the 2016 presidential election resulted in a change of administration.

The new administration quickly moved for an abeyance (or stay) of the case for as long as the agency needed to review and withdraw the CPP. The court issued a series of 60-day abeyances and ultimately dismissed the case on September 17, 2019. Meanwhile, in August 2018, EPA proceeded to withdraw the CPP and proposed a different rule under the same provision of the CAA. The new rule, known as the Affordable Clean Energy (“ACE”) rule, would establish a BSER that only includes measures that can be undertaken at an individual power plant, rather than the broader suite of measures envisioned under the CPP. The ACE rule would also allow states to decide individually, on a case-by-case basis, the standards to be achieved by the best system of emission reductions, as well as exempt certain upgrades of fossil-fuel power plants from the CAA’s New Source Review program and extend the time to implement SIPs after the ACE rule is finalized. The ACE rule was challenged in court by environmental groups and states alleging that the revised rule inadequately responds to EPA’s responsibility to protect public health and welfare. SMUD joined in this litigation along with other challengers. The D.C. Circuit vacated the ACE rule on January 19, 2021, and remanded it to the EPA for review and revision, just days before a new presidential administration took office. Several states led by West Virginia and coal industry members appealed the decision.

In June 2022, the U.S. Supreme Court issued its opinion in *West Virginia v. EPA*, striking down the CPP and foreclosing any future regulations of “significant political and economic significance” if Congress has not expressly authorized them. While the decision does not restrict EPA to only requiring measures “inside the fence line” at an individual power plant to control GHGs, it appears unlikely that the EPA will be able to require material reductions in GHGs to mitigate climate change through section 111(d) of the CAA.

Federal Clean Energy Legislation. SMUD actively participates in discussion at the federal level regarding legislation that would meaningfully impact SMUD’s existing GHG reduction strategies or impose new requirements for electric generators, including a proposed federal clean energy standard. In the 117th Congress, a clean electricity performance program was considered but ultimately lacked support to pass. Instead, Congress extended and expanded clean energy tax credits and created new grant and rebate programs to incentivize clean energy investments in the Inflation Reduction Act of 2022. While it is possible that a future Congress may revisit the concept of a clean energy standard or other GHG reduction regime, it is possible that the passage of the Inflation Reduction Act will diminish the likelihood of a new regulatory framework being enacted in the near future.

SMUD is unable to predict whether any new EPA rulemakings will be undertaken, and what the full impact of the reduction of fossil-based generation over time will have on the operations and finances of SMUD’s electric system or the electric utility industry generally.

State Legislation and Regulatory Proceedings

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills provide for reduced GHG emission standards and greater investment in energy efficient and environmentally friendly generation alternatives through more stringent RPS. Additionally, ongoing regulatory proceedings address water flow and quality issues related to the Sacramento – San Joaquin River Delta. The following is a brief summary of these bills and regulatory proceedings.

Greenhouse Gas Emissions. On September 27, 2006, the Governor of the State signed into law AB 32, the Global Warming Solutions Act of 2006 (“AB 32”). AB 32 requires the California Air Resources Board (“CARB”) to adopt enforceable GHG emission limits and emission reduction measures in order to reduce GHG emissions to 1990 levels by 2020. In addition, AB 32 establishes a mandatory reporting program for all IOUs, local, publicly-owned electric utilities and other load-serving entities (electric utilities providing energy to end-use customers) (“LSEs”). The AB 32 reporting program allows CARB to adopt regulations using market-based compliance mechanisms such as a “cap-and-trade” system.

On December 16, 2010, CARB approved a resolution adopting cap-and-trade regulations for the State. The regulations became effective on January 1, 2012. As adopted, the cap-and-trade program covers sources accounting for 85% of the State’s GHG emissions, the largest program of its type in the United States.

The cap-and-trade program has been implemented in phases. The first phase of the program (through December 31, 2014) introduced a hard emissions cap on the combined electric utility and large industrial sectors, covering all sources emitting more than 25,000 metric tons of carbon dioxide-equivalent greenhouse gases (“CO₂e”) per year. In 2015, the program was expanded to cover distributors of transportation, natural gas, and other fossil fuels. The cap declined about 2 percent in 2014, and declined 3 percent annually from 2015 to 2020. The cap-and-trade program requires covered entities to retire compliance instruments (allowances and carbon offsets) for each metric ton of CO₂e they emit. Initially, CARB allocated free allowances to LSEs and most industrial facilities at roughly 90% of their average emissions. SMUD was granted a higher amount because of early action taken to reduce GHG emissions. In the case of electric utilities, the value of allowances must be used to benefit ratepayers and achieve GHG emission reductions. As the program matures, some covered entities will be required to buy an increasing portion of their allowances at auction or on the secondary market. The cap-and-trade program also allows covered entities to use offset credits for compliance purposes (not exceeding 8% of a regulated entity’s compliance obligation through 2020, 4% from 2021 through 2025, and 6% from 2026 through 2030). Offsets must be obtained from certified projects in sectors that are not regulated under the cap-and-trade program and are subject to other restrictions.

In November of 2012, CARB conducted its first allowance auction and auctions now occur on a quarterly schedule. On January 1, 2014, CARB linked the State cap and trade program with a companion program in the Canadian province of Quebec. The first quarterly joint auction for the linked programs occurred in November, 2014. On January 1, 2018, CARB linked the State’s cap-and-trade program with a companion program in the Canadian province of Ontario. Immediately thereafter, an entity in any one of the three jurisdictions was able to purchase allowances on the secondary market in a linked jurisdiction, and as of February 21, 2018 (the date of the first joint auction) could purchase allowances in the joint auction. In June 2018, elections in Ontario changed political parties and the new administration formally withdrew from the Cap-and-Trade linkage. CARB has limited purchase and use of Ontario allowances in response. The August 2018 Cap and Trade auction did not include Ontario. In 2021, the Washington state legislature passed a Cap-and-Trade bill, which [is expected to] interact with the State’s markets. Future potential near-term links to the CARB cap-and-trade program also include the states of Oregon, which has

adopted a cap and trade program, and New Mexico, which is considering the adoption of a cap and trade program.

On October 7, 2015, the Governor of the State signed SB 350 that contained aggressive goals for reducing carbon emissions by 2030, including raising the proportion of renewable energy to 50%, reducing the use of petroleum fuel in cars and trucks by up to 50%, and doubling the energy efficiency of existing buildings. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*” for additional information. In addition, SB 350 established requirements for larger POUs to adopt (by January 1, 2019) and file with the CEC Integrated Resource Plans (“IRPs”) by April 2019 that would show planned procurement to achieve the 50% RPS and State GHG goals established by CARB. The CEC developed “guidelines” for these IRPs for POUs in 2017, updated them in 2018, and proposed additional updates in 2022. CARB established specific GHG target ranges for these IRPs in summer 2018, with SMUD’s planning target set at 1.1 – 1.9 million metric tons of emissions. SMUD developed and adopted an IRP in 2018 through a comprehensive public process and filed the adopted IRP with the CEC in April 2019. SMUD adopted an updated IRP in June 2022 and filed the updated IRP with the CEC in September 2022. SMUD’s updated IRP plans for a greater than 92% reduction in GHG emissions by 2030 relative to 1990 levels, which equals approximately 250,000 metric tons of GHG emissions in 2030. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Renewable Energy and Climate Change*.”

On April 29, 2015, the Governor of the State signed Executive Order B-30-15, establishing a goal for the State to reduce GHG emissions to 40% below 1990 levels by 2030. In 2016, the State Legislature passed Senate Bill 32 (“SB 32”), which codified Governor Brown’s goal of reducing the State’s GHG emissions to 40% below 1990 levels by 2030. In 2017, the State Legislature passed Assembly Bill 398 (“AB 398”), explicitly authorizing the continuation of the cap and trade program, with designated changes, through 2030. Subsequently, CARB adopted an initial set of regulatory changes extending the Cap-and-Trade program, including establishing utility sector allowance allocations through 2030. In 2018, CARB completed a rulemaking to implement the cap-and-trade program changes designated by AB 398. These changes include development of a hard price ceiling for the cap-and-trade program and two price-containment points below that ceiling, in an attempt to ensure stable prices in the program. CARB adopted final regulations on December 13, 2018.

In December 2022, CARB approved the agency’s 2022 Scoping Plan, a roadmap to reducing GHG emissions by 85% and achieving economy-wide carbon neutrality by 2045. The Plan does not impose new mandates, but calls for state policymakers and regulatory agencies to implement programs and policies that support the Plan’s goals. In 2023, CARB signaled that they would reopen regulations that govern several programs that SMUD participates in, including Cap and Trade, to align them with the goals set forth in the Scoping Plan. SMUD will monitor and, as appropriate, participate in these forthcoming regulatory proceedings.

In addition, any new projects constructed in the State, including power plants, that may cause a significant adverse impact on the environment must be analyzed under CEQA. Some State agencies have begun using CEQA in novel ways to require mitigation of “significant” GHG emissions caused, either directly or indirectly, by a project. Pursuant to Senate Bill 97 passed in 2007, CARB will assist the Governor’s Office of Planning and Research in setting thresholds of significance under CEQA of GHG impacts from new projects. This is an area of State law that is evolving and untested in the courts. However, there is a risk that any project proponent of an electric system infrastructure project might have to mitigate such potential impacts to a level of less than significance.

On December 3, 2012, the Superior Court issued a ruling in *Cleveland National Forest Foundation v. San Diego Association of Governments* (“SANDAG”), Case No. 2100-00101593, that sided with the

State Attorney General and the other petitioners stating that SANDAG did not follow CEQA when it adopted a \$257 billion regional transportation plan in 2011. The ruling expressly invalidated the certification of the Environmental Impact Report (“EIR”) on the grounds that the EIR should have analyzed the plan’s consistency with the governor’s policy goal to reduce GHG emissions by 80% by 2050 as articulated in the 2005 Executive Order S-03-05. On November 24, 2014, the Fourth Appellate District upheld the trial court in a published decision, and SANDAG appealed to the State Supreme Court. On July 13, 2017, the Supreme Court reversed and held that SANDAG’s decision not to adopt the 2050 goal was not an abuse of discretion. Nevertheless, the Court articulated three clear principles for agencies to follow in their CEQA review of planning documents: 1) agencies must take seriously the significance of even small increases in GHG emissions; 2) they must consider science-based State policy guidance in their decision-making; and 3) they are required to use the best scientific information available to determine whether their planning decisions are consistent with the State’s goals. These principles will apply to SMUD in CEQA reviews of future projects.

On September 29, 2006, the Governor of the State signed into law Senate Bill 1368 (“SB 1368”), the GHG Emissions Performance Standard (“EPS”). SB 1368 limits long-term investments in baseload generation by the State’s utilities to power plants that meet an EPS jointly established by the CEC and the CPUC. The agencies have set the EPS at 1,100 pounds CO₂ per MWh, which is roughly half of the CO₂ emissions rate of a conventional coal-fired power plant. CEC regulations to implement the law for POU’s were approved by the Office of Administrative Law on October 16, 2007.

SMUD’s primary supply and demand-side resource needs to meet customers’ electricity usage patterns over the next 10 years are for peaking resources. Currently there is a ban in the State that prohibits the development of nuclear power plants until there is a permanent storage solution for spent fuel rods. With the effective ban on new coal power imports under SB 1368, natural gas-fired, combined cycle power plants would appear to be the primary viable option for fossil fuel-based baseload power plant development absent the implementation of new technologies in connection with other resource options. The reliance on a single fuel source will continue to put pressure on the natural gas market in the United States. SMUD has in place a natural gas procurement plan to mitigate natural gas volatility, see “POWER SUPPLY AND TRANSMISSION – Fuel Supply” above.

On September 16, 2022, the Governor of the State signed into law SB 1158, which requires every retail supplier of electricity to annually report hourly greenhouse gas emissions. The California Energy Commission will establish a process by July 1, 2024, and the implementation date is 2028.

Also on September 16, 2022, the Governor of the State signed into law SB 1020, which creates interim climate targets under which eligible renewable energy resources and zero-carbon resources must supply 90% of all retail sales of electricity to California end-use customers by December 31, 2035, and 95% by December 31, 2040. The bill also requires each State agency to ensure that zero carbon resources and eligible renewable energy resources supply 100 percent of electricity procured on its behalf by December 31, 2035. SMUD provides electricity to a number of State agency buildings and will work with State agencies to comply with this requirement.

Reliability. On June 30, 2022, the Governor signed the 2022-23 budget, along with a number of trailer bills, which provide implementing details on the budget line items. Included in AB 205, the energy trailer bill, are a number of reliability programs.

1. CEC Distributed Electricity Backup Assets Program to incentivize the construction of cleaner and more efficient distributed energy assets that would serve as on-call emergency supply or load reduction for the state’s electrical grid during extreme events.

2. CEC Demand Side Grid Support Program to pay customers to reduce demand during stressed grid events this summer. SMUD is actively engaging the CEC on the development of this program.
3. DWR Strategic Reliability Reserve to secure resources for summer reliability or to preserve the option to extend the life of facilities that otherwise would retire, new temporary generators of more than 5 megawatts (MWs), new energy storage systems of at least 20 MWs, generation facilities that use lean, zero-emission fuel technologies, or new zero-emission technologies that can be operational by December 31, 2026.

Energy Efficiency. Senate Bill 1037 (“SB 1037”), signed by Governor Schwarzenegger on September 29, 2005, requires that each municipal electric utility, including SMUD, prior to procuring new energy generation resources, first acquire all available energy efficiency, demand reduction and renewable resources that are cost effective, reliable and feasible. SB 1037 also requires each municipal electric utility to report annually to its customers and to the CEC its investment in energy efficiency and demand reduction programs. Further, State Assembly Bill 2021 (“AB 2021”), signed by the Governor on September 29, 2006 requires that the publicly owned utilities establish energy efficiency and demand reduction targets and report and explain the basis of the targets beginning June 1, 2007 and every three years thereafter for a ten year horizon. Future reporting requirements as set forth in AB 2021 include: (i) the identification of sources of funding for the investment in energy efficiency and demand reduction programs, (ii) the methodologies and input assumptions used to determine cost effectiveness, and (iii) the results of an independent evaluation to measure and verify energy efficiency savings and demand reduction program impacts. The information obtained from local publicly owned utilities will be used by the CEC to present the progress made by the publicly owned utilities on the State’s goal of reducing electrical consumption by 10% in ten years and amelioration with the GHG targets presented in Executive Order S-3-05 enacted by the Governor of the State on June 1, 2005.

In response to SB 1037 and AB 2021, SMUD established a specific goal of reducing energy consumption by 15% by 2018 and adopted annual targets for gigawatt hour and megawatt savings. SMUD revisits its energy efficiency goals and programs on a regular basis to ensure compliance with State policies established by SB 1037 and AB 2021 (as modified by SB 350).

SB 350 (passed in 2015) requires the CEC to develop statewide energy efficiency targets for 2030 aimed at doubling the achieved savings, and requires POUs to establish efficiency targets that are “consistent” with those targets. In 2017, the CEC developed a report on the doubling of energy efficiency targets required by SB 350. Both SB 350 and the CEC report contemplate the use of fuel substitution to meet energy efficiency targets and have a strong focus on carbon reduction. In response, SMUD developed a methodology and carbon tool to count fuel substitution, namely switching natural gas end-uses to efficient electric end uses and measuring savings in carbon emissions. SMUD presented its methodology to the joint state agency working group known as the Fuel Substitution Working Group several times in 2019 and adopted a carbon-based metric in early 2020 to guide overall SMUD carbon targets. This goal is expected to facilitate substantial expansion of building electrification and result in more than double the overall amount of energy efficiency being delivered per year, when measured on a carbon reduction basis. The vast majority of this energy efficiency (more than 85%) is expected to be delivered through efficient electrification by 2030.

Also passed in 2015 was AB 802. This bill directed the CEC to develop a State-wide building energy use benchmarking and public disclosure program for those buildings greater than 50,000 square feet. As set forth in regulations adopted by the CEC, building owners are required to report building characteristic information and energy use data each year. The reporting began in 2018 for buildings without residential utility accounts and in 2019 for buildings with 17 or more residential utility accounts. Energy utilities must provide building-level energy use data to building owners upon request.

In order to support the implementation of SB 350 and AB 802, the CEC opened a rulemaking to amend its Title 20 Data Collection regulations, resulting in an expansion of customer data utilities must report to the CEC. The CEC adopted regulations pursuant to the rulemaking in February 2018, and the regulations were approved and went into effect in the Summer of 2018. SMUD has made several data filings under the new regulations. In 2020, the CEC opened a second phase of Data Collection rulemaking to amend regulations necessary to develop the policy reports and analysis as required by statute to assist in the CEC's energy forecasting and assessment activities. The OAL approved the codifying of the regulations from that proceeding on December 30, 2021.

Electric Transportation Mandates Executive Order B-48-18, enacted January 2018, ordered all state entities to work with the private sector and all appropriate levels of government to put at least 5 million zero-emission vehicles on California roads by 2030, as well as 250,000 zero-emission vehicle chargers by 2025.

In September 2020, Governor Newsom signed Executive Order N-79-20 to accelerate actions to mitigate and adapt to climate change, and to more quickly move toward a low-carbon, sustainable and resilient future. Executive Order N-79-20 states the goal of 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035 and 100 percent of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks.

CARB has proposed or adopted a suite of regulations to support these State policies, including the Zero Emission Forklift Regulation, Advanced Clean Trucks Rule (the "ACT Rule"), Advanced Clean Cars II ("ACC II"), and the Advanced Clean Fleets Rule (the "ACF Rule"). The ACT Rule and ACC II establish increasing zero-emission vehicle ("ZEV") sales requirements for truck and light-duty vehicle manufacturers, respectively. The ACT Rule, which took effect in March 2021, requires that by 2035, at least 55% of Class 2b-3 truck sales are ZEVs, at least 75% of Class 4-8 straight truck sales, and 40% of truck tractor sales. ACC II, which took effect in November 2022, requires that 100% of light-duty passenger car, truck, and SUV sales in California be ZEV by the 2035 model year.

CARB is expected to adopt the ACF Rule in 2023. The proposed ACF Rule would establish ZEV purchase and fleet composition requirements for on-road medium- and heavy-duty ("MHD") fleets in California. Under the proposed ACF Rule, public fleets like SMUD would have two compliance options. The first is a ZEV purchase requirement: 50% of annual MHD vehicle purchases would need to be ZEVs starting in 2024, and 100% starting in 2027. The second is the optional ZEV milestone option, under which the composition of the MHD fleet meets certain ZEV percentages over time, which would provide SMUD with considerably greater compliance flexibility. The proposed ACF Rule would also accelerate the manufacturer ZEV sales requirement to 100% of all MHD truck sales by the 2036 model year.

Additionally, CARB is developing a regulation to drive greater deployment of zero-emission forklifts within fleets throughout the State. This Zero-Emission Forklift Regulation is scheduled for CARB consideration in 2023.

Increases in ZEV adoption and deployment will result in increased customer usage of electricity. The ACF Rule would also require SMUD, as a fleet owner, to transition SMUD's MHD fleet to ZEVs.

Rooftop Solar Mandate. In February, 2018, the CEC approved updates to the 2019 Building Energy Efficiency Standards to require installation of rooftop photovoltaic solar systems for residential buildings under three stories constructed starting in 2020, with an option to satisfy the requirement through community shared solar electric generation or battery storage systems. This "Community Solar" compliance mechanism permits a program administrator, such as a utility, to provide solar power to participating residential customers instead of rooftop solar. SMUD submitted an application to the CEC to

be a program administrator of SMUD's Community Solar program, Neighborhood SolarShares, in 2019, and the CEC approved SMUD's application in February 2020. In 2021, the CEC revised the Community Solar provisions in the 2022 Building Energy Efficiency Standards to include an "opt-out" provision, which will impact the design and implementation of SMUD's Neighborhood SolarShares program. SMUD updated its Neighborhood SolarShares program materials to incorporate the 2022 revisions, which took effect in January 2023, and has received approval from the CEC to continue serving as a program administrator. See also "BUSINESS STRATEGY – Serving SMUD's Customers – *Renewable Options.*"

Renewables Portfolio Standard. Senate Bill 100 was passed by the Legislature and approved by Governor Brown on September 10, 2018. The bill sets a 50% RPS target for 2026 and sets compliance period targets at 44% by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. The bill also creates a statewide planning goal to meet all of the state's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045.

Load Management Standards. Sections 25213, 25218(e) and 25403.5 of the Public Resources Code mandate and authorize the CEC to adopt rules and regulations to reduce the uneconomic and unnecessary consumption of energy and to manage energy loads, or demand, to help maintain electrical grid reliability. The original Load Management Standards ("LMS") regulations were adopted in 1979 and required the implementation of marginal cost pricing industrial time-of-use rates, and residential load control programs. In October 2022, the CEC adopted an update to the LMS regulations to require the largest electric service providers in California (including SMUD) to develop retail electricity rates that change at least hourly to reflect locational marginal costs and submit those rates to the utility's governing body for approval. The LMS proposes the following: a) voluntary hourly or sub-hourly rates for each customer class or b) a cost-effective program, to be implemented by the utilities by January 2026. The effective date of the LMS regulation is April 1, 2023. The LMS regulations are intended to increase efficiency and demand flexibility in California's electricity grid. SMUD's Pricing team is leading SMUD's LMS implementation work, including the development of a Compliance Plan to be submitted to SMUD's Board by the fourth quarter of 2023 and then to the CEC.

Energy Storage Systems. In September 2010, the State Legislature enacted, and the Governor signed into law, Assembly Bill 2514 ("AB 2514"). On or before March 1, 2012, the governing board of each POU was required to initiate a process to determine appropriate targets, if any, for the utility to procure viable and cost-effective energy storage systems to be achieved by December 31, 2016, and December 31, 2020. The bill required each POU to report certain information to the CEC. In 2014, SMUD set a 0 MW target for 2017, and in 2017 set a 9 MW target for 2020. In 2018, SMUD identified a potential need for 246 MW of storage by 2030. Following SMUD's 2020 compliance report to the CEC in January 2021, going forward SMUD will evaluate and report energy storage planning as part of its IRP update at least once every five years. See also "BUSINESS STRATEGY – Sustainable Power Supply and Transmission – *Energy Storage Systems.*"

Sacramento-San Joaquin River Bay-Delta Processes. The Sacramento-San Joaquin River Delta is an expansive inland estuary, formed at the western edge of the California Central Valley by the confluence of the Sacramento and San Joaquin rivers ("Delta"). There are two substantial Delta planning processes with the potential to affect (1) energy available for SMUD's purchase from the Central Valley Project ("CVP") and (2) flows within the Upper American River watershed. These processes are called the Bay-Delta Water Quality Control Plan ("Bay-Delta Plan") and the Delta Conveyance Project.

The Bay-Delta Water Quality Control Plan is updated periodically by the State Water Resources Control Board ("SWRCB"), the last time being in 2006. The current Bay-Delta Plan update process is being implemented in four phases. The first phase considered southern Delta water quality, with a significant focus on San Joaquin River tributaries. Phase 2, which is initially being addressed by a

document under development by SWRCB staff, will address Sacramento River tributaries and various flow related issues, including the critically important one of those tributaries' contribution to Delta outflow. Phase 3 will concern changes to water rights needed to implement Phase 2. A substantial change in Delta outflow requirements could have a major impact on the timing of hydroelectric energy generation by the CVP. SMUD has a long-term agreement with WAPA to purchase some of this power (see "POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – *Western Area Power Administration*"). On July 18, 2018, the SWRCB released an updated Framework document signaling its staff's intent to propose Delta outflow requirements of 45–65% unimpaired flows for the Sacramento River tributaries (which includes the American River, the upper portions of which are where the UARP sits), though the report will analyze requirements of 35–75%. If these criteria were implemented, they could cut CVP generation by 50 to 63%. Governor Newsom has urged the SWRCB, other agencies and affected parties to execute voluntary agreements to address species' needs and outflow requirements. Although the negotiations have been slow, it is expected they will eventually result in a reasonable compromise. If the agreements do not come to fruition, SMUD plans to fully participate in all regulatory and legal proceedings to argue for consideration and minimization of impacts to hydropower generation. SMUD will assess the potential impacts of proposed modifications to the present outflow objectives on SMUD's operations once the SWRCB makes those available.

In July 2022, the State Department of Water Resources ("DWR") released a Draft Environmental Impact Report ("EIR") to evaluate the potential impacts of carrying out the Delta Conveyance Project; the U.S. Army Corps of Engineers released a separate Environmental Impact Statement to evaluate the effects of the Project pursuant to the National Environmental Policy Act. The Delta Conveyance Project is expected to entail construction of two intakes on the Sacramento River that will carry water to a main tunnel to the California Aqueduct for delivery south of the Delta. The Delta Conveyance Project may pose the potential to exacerbate impacts to already imperiled aquatic species, and in turn could have indirectly prompted regulatory agencies to require third parties, such as SMUD, to compensate by making changes to their operations. The Bureau of Reclamation is not a party to the Delta Conveyance Project, which should eliminate the potential for CVP power to be used to supply Delta Conveyance Project pumps. SMUD will monitor the proceedings and participate as necessary to ensure any impacts to SMUD interests are minimized.

Proposition 26. Proposition 26 was approved by the electorate on November 2, 2010 and amends Article XIII A and Article XIII C of the State Constitution. Proposition 26 imposes a two-thirds voter approval requirement for the imposition of fees and charges by the State, unless the fees and charges are expressly excluded. It also imposes a majority voter approval requirement on local governments with respect to fees and charges for general purposes, and a two-thirds voter approval requirement with respect to fees and charges for special purposes, unless the fees and charges are expressly excluded. The initiative, according to its supporters, is intended to prevent the circumvention of tax limitations imposed by the voters pursuant to Proposition 13, approved in 1978, and other measures through the use of non-tax fees and charges. Proposition 26 expressly excludes from its scope a charge imposed for a specific local government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable cost to the local government of providing the service or product. Proposition 26 is not retroactive as applied to local governments. Although SMUD believes that the initiative was not intended to apply to fees for utility services such as those charged by SMUD and its fees and charges meet the criteria of the exclusion described above, it is possible that Proposition 26 could be interpreted to further limit fees and charges for electric utility services and/or require stricter standards for the allocation of costs among customer classes. SMUD is unable to predict at this time how Proposition 26 will be interpreted by the courts or what its ultimate impact will be. As of the date of this Official Statement, SMUD is unaware of any fees or charges relating to SMUD's service that would have to be reduced or eliminated because of Proposition 26. However, certain of SMUD's adopted rate increases have been challenged. See "LEGAL PROCEEDINGS – Proposition 26 Lawsuit."

Wildfire Legislation. In September 2016, Governor Brown signed into law Senate Bill 1028 (“SB 1028”), which requires POU’s (including SMUD), IOUs, and electrical cooperatives to construct, maintain and operate their electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by electrical lines and equipment. SB 1028 also requires the governing board of POU’s to make an initial determination whether any portion of that geographical area has a significant risk of catastrophic wildfire resulting from those electrical lines and equipment, based on historical fire data and local conditions, and in consultation with the fire departments or other entities responsible for control of wildfires within the geographical area.

Senate Bill 901 (“SB 901”), signed into law in September 2018 by Governor Brown, further addresses response, mitigation and prevention of wildfires. The bill requires POU’s, including SMUD, before January 1, 2020, and annually thereafter, to prepare a wildfire mitigation plan and present it in a public meeting to their governing board. SB 901 requires POU’s to accept comments on the wildfire mitigation plan from the public, other local and State agencies, and interested parties, and to verify that the plan complies with all applicable rules, regulations, and standards, as appropriate. The bill requires a qualified independent evaluator to review and assess the comprehensiveness of its wildfire mitigation plan and present its report to the board in a public meeting.

In 2019, Governor Newsom released his comprehensive strategy on wildfires, laying the groundwork for legislative discussions on utility wildfire liability and allocating costs associated with catastrophic wildfires, among other things. While the Governor supported a modification of State’s current inverse condemnation doctrine, under which utilities are held liable for wildfire damage without regard to the fault of the utility, no bill was introduced. AB 1054 (Holden) did pass in 2019 that included several provisions for solvent investor owned utilities, including the development of a fund to help pay victim claims for utility ignited wildfires. The bill also created a new Wildfire Safety Division within the CPUC to prioritize wildfire safety throughout the State, and established an appointed Wildfire Safety Advisory Board to advise and make recommendations relating to wildfire safety to this new Division. For POU’s, the bill requires submittal of annual wildfire mitigation plans to the Advisory Board for review and advisory opinions.

Senate Bill 247 (“SB 247”), signed by Governor Newsom on October 2, 2019, establishes notification, audit and reporting guidelines for electrical corporations relating to vegetation management requirements in the wildfire mitigation plan. SB 247 also specifies the qualifications for electrical line clearance tree trimmers performing work to comply with the vegetation management requirements in an electrical corporation’s wildfire mitigation plan and requires that qualified line clearance tree trimmers be paid no less than a specified prevailing wage rate. POU’s are not required to adhere to SB 247, but the market impacts are projected to significantly increase SMUD’s annual vegetation management costs.

Nonstock Security. SMUD sponsored legislation in 2019, Assembly Bill 689, which was signed into law by Governor Newsom on September 5, 2019. This bill expressly allows SMUD the ability to operate a pilot project (effective January 1, 2020, to January 1, 2025), of up to three acquisitions, to hold nonstock security in a corporation or other private entity if acquired as part of a procurement of goods or services from that entity, provided that no separate funding is expended solely for the nonstock security. This will allow SMUD to realize the financial benefits of its investments, partnerships, and intellectual property.

On September 15, 2022, the Board authorized the CEO & GM to enter into a joint collaboration agreement with ESS Tech, Inc. (“ESS”). Under that agreement SMUD would procure from ESS iron flow batteries for utility scale long-duration energy storage applications. The agreement contemplates a multi-year phased deployment of up to 200MW/2GWh of long duration energy storage by 2028. As part of that procurement, SMUD acquired nonstock security in ESS.

Future Regulation

The electric industry is subject to continuing legislative and administrative reform. States and Federal entities routinely consider changes to the way in which they regulate the electric industry. Recently, both further deregulation and forms of additional regulation have been proposed for the industry, which has been highly regulated throughout its history. SMUD is unable to predict at this time the impact any such proposals will have on the operations and finances of SMUD or the electric utility industry generally.

OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

CAISO Market Initiatives

The CAISO routinely conducts a number of initiatives and stakeholder processes that propose certain operational and market changes that impact SMUD. SMUD does and will continue to monitor the various initiatives proposed by the CAISO and participate in its stakeholder processes to ensure that its interests are protected.

SMUD participates in the CAISO market for only a small percentage of energy needs, however, it continues to benefit from its participation in the CAISO's WEIM and is currently exploring further participation in the CAISO's proposed Extended Day Ahead Market ("EDAM") (both the WEIM and EDAM are described further below). Along with monitoring other key market initiatives at the CAISO which impact wholesale energy markets, SMUD will continue to actively participate in all processes related to EIM and EDAM, to ensure both participation models are beneficial to SMUD's customers. Given its success in EIM and active engagement with the CAISO and CAISO leadership, SMUD has earned a key role in the stakeholder processes related to these important and evolving markets.

Resource Adequacy Filing

In September 2005, the State Legislature enacted and the Governor signed into law Assembly Bill 380 ("AB 380"), which requires the CPUC to establish resource adequacy requirements for all LSEs within the CPUC's jurisdiction. In addition, AB 380 requires publicly owned utilities, including SMUD, to meet the most recent resource adequacy standard as adopted by the WECC. In October 2005, the CPUC issued a decision stating that LSEs under its jurisdiction would be required, by June 2006, to demonstrate that they have acquired capacity sufficient to serve their forecast retail customer load plus a 15-17% planning reserve margin. In March 2021, the CPUC issued a decision requiring the three largest investor owned utilities (PG&E, Southern California Edison, and San Diego Gas & Electric) to target a minimum of 2.5% of incremental resources for their planning reserve margin for 2021 and 2022. Subsequently, in December 2021, the CPUC issued another decision that increased the investor-owned utilities' minimum target by an additional 2.5-5% of incremental resources for 2022 (which creates an effective planning reserve margin of 20-22%) and extended this target to 2023. And in June 2022, the CPUC issued a decision adopting a planning reserve margin of 16% for 2023, and 17% for 2024, for all LSEs under its jurisdiction. The WECC has yet to formally adopt a resource adequacy requirement. However, consistent with current WECC practices, SMUD utilizes a 15% planning reserve margin when assessing the need for future resources.

Western Energy Imbalance Market and Extended Day Ahead Market

Federal and state policymakers have long-promoted the development of organized markets in the west as a means (among other reasons) to better integrate intermittent renewable resources into the electric system, the first of which markets is the Western EIM, operated by the CAISO. The CAISO successfully launched the WEIM, a real time only imbalance market, on October 1, 2014, with PacifiCorp as the first participant. Since this time, the WEIM has grown significantly with the additions of NV Energy, Arizona

Public Service, Puget Sound Energy, Portland General Electric, Idaho Power, Powerex, BANC, the Salt River Project, Seattle City Light, the Turlock Irrigation District, the Los Angeles Department of Water and Power, NorthWestern Energy, the Public Service Company of New Mexico, Avista, Tacoma Power, Bonneville Power Administration, and Tucson Electric Power. Additionally, the WEIM footprint will continue to expand further in 2023 with the additions of Avangrid, WAPA Desert Southwest Region, and El Paso Electric. SMUD expects the WEIM to comprise a significant portion of the Western Interconnection in 2023.

To date, participation in the WEIM by SMUD has shown significant financial and operational benefits, in addition to furthering an already favorable working partnership between SMUD and the CAISO to develop solutions to integrate renewable resources in support of carbon reduction goals.

BANC's participation not only signaled the first public power participant in the EIM, but it was also implemented utilizing a unique phased approach, with SMUD (as the largest member of BANC) implementing so-called WEIM Phase 1 in 2019, while the other BANC members and WAPA (the "Phase 2 Parties") joined after further evaluation and approvals in March of 2021.

Part of the BANC Phase 2 participation included reimbursement to SMUD certain upfront infrastructure costs incurred by SMUD in Phase 1 to establish BANC as an WEIM Entity. This reimbursement to SMUD by the Phase 2 Parties has been completed.

The CAISO and WEIM participants, including SMUD and BANC, have participated in developing a design framework to extend the successful WEIM real time framework to the EDAM. Like WEIM, EDAM would broaden the access to regional resources for the reliable integration of renewable resources, only over a longer (day ahead) time horizon by allowing for a more economic and efficient optimization of regional resources by providing grid operators greater time (day ahead as opposed to real time) to commit or decommit units based on market price signals. Only participants in the WEIM will be allowed to extend their participation to EDAM. The CAISO launched a public stakeholder initiative and utilized most of 2022 developing the EDAM design. On February 1, 2023 the CAISO Board of Governors and EIM Governing Body approved the EDAM proposal. Tariff development, regulatory approvals and implementation activities will take place in 2023 and 2024, with expected market go-live first quarter 2025. SMUD (and BANC) will likely need to consider its participation before 2024 if it wishes to on-board in time for the first phase of EDAM participation in 2025. Similar to the process around WEIM participation, SMUD, along with BANC, are performing cost-benefit studies to ensure EDAM participation will expand on the existing WEIM benefits prior to seeking approvals to proceed.

PG&E Bankruptcy

On January 14, 2019, PG&E and its parent company, PG&E Corporation, announced their intention to file, on or about January 29, 2019, for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code (the "Bankruptcy Code") mainly as a result of wildfire liability claims and exposure. On January 29, 2019, PG&E and PG&E Corporation filed for bankruptcy protection under Chapter 11 of the Bankruptcy Code (the "Bankruptcy Code"). On May 28, 2020, the CPUC approved PG&E's Plan of Reorganization. On June 20, 2020 the United States Bankruptcy Court for the Northern District of California confirmed PG&E's Plan of Reorganization. SMUD does not anticipate any material impacts to SMUD in connection with PG&E's Plan of Reorganization.

In addition, other electric utilities, including the other major IOUs in the State, Southern California Edison and San Diego Gas & Electric Company, have experienced credit rating downgrades as a result of potential wildfire liabilities exposure, which may have implications for the electric market generally.

Other Factors

The electric utility industry in general has been, or in the future may be, affected by a number of other factors which could impact the financial condition and competitiveness of many electric utilities and the level of utilization of generating and transmission facilities. In addition to the factors discussed above, such factors include, among others, (a) effects of compliance with rapidly changing environmental, safety, licensing, regulatory and legislative requirements other than those described above; (b) changes resulting from conservation and demand side management programs on the timing and use of electric energy; (c) changes resulting from a national energy policy; (d) effects of competition from other electric utilities (including increased competition resulting from mergers, acquisitions, and “strategic alliances” of competing electric and natural gas utilities and from competitors transmitting less expensive electricity from much greater distances over an interconnected system) and new methods of, and new facilities for, producing low cost electricity; (e) the repeal of certain federal statutes that would have the effect of increasing the competitiveness of many IOUs; (f) increased competition from independent power producers and marketers, brokers and federal power marketing agencies; (g) “self-generation” or “distributed generation” (such as solar, microturbines and fuel cells) by industrial and commercial customers and others; (h) issues relating to the ability to issue tax exempt obligations, including severe restrictions on the ability to sell to nongovernmental entities electricity from generation projects and transmission service from transmission line projects financed with tax exempt obligations; (i) effects of inflation on the operating and maintenance costs of an electric utility and its facilities; (j) changes from projected future load requirements; (k) increases in costs and uncertain availability of capital; (l) issues relating to supply chains and the uncertain availability or increased costs of necessary materials; (m) shifts in the availability and relative costs of different fuels (including the cost of natural gas); (n) sudden and dramatic increases in the price of energy purchased on the open market that may occur in times of high peak demand in an area of the country experiencing such high peak demand, such as has occurred in the State; (o) issues relating to risk management procedures and practices with respect to, among other things, the purchase and sale of natural gas, energy and transmission capacity; (p) other legislative changes, voter initiatives, referenda and statewide propositions; (q) effects of changes in the economy; (r) effects of possible manipulation of the electric markets; (s) natural disasters or other physical calamities, including, but not limited to, earthquakes, droughts, severe weather, wildfires and floods; (t) changes to the climate, including increasing volatility in rainfall in the Western United States and a reduction in the depth and duration of the Sierra snowpack; (u) issues relating to cyber-security; and (v) outbreaks of infectious diseases or the occurrence of pandemics. Any of these factors (as well as other factors) could have an adverse effect on the financial condition of any given electric utility, including SMUD’s electric utility, and likely will affect individual utilities in different ways.

SMUD is unable to predict what impact such factors will have on the business operations and financial condition of SMUD’s electric system, but the impact could be significant. SMUD has taken major steps to mitigate the impacts of many of the changes. This Official Statement includes a brief discussion of certain of these factors. This discussion does not purport to be comprehensive or definitive, and these matters are subject to change subsequent to the date hereof. Extensive information on the electric utility industry is available from the legislative and regulatory bodies and other sources in the public domain, and potential purchasers of the [2023 Bonds] should obtain and review such information.

APPENDIX B

**2022 AND 2021 CONSOLIDATED FINANCIAL STATEMENTS
AND REPORT OF INDEPENDENT ACCOUNTANTS**

APPENDIX C

BOOK-ENTRY SYSTEM

The information in this Appendix regarding DTC has been provided by DTC, and SMUD takes no responsibility for the accuracy or completeness thereof. SMUD cannot and does not give any assurances that DTC, DTC Participants or Indirect Participants will distribute the Beneficial Owners either (a) payments of interest or principal with respect to the 2023 Subordinated Bonds or (b) certificates representing ownership interest in or other confirmation of ownership interest in the 2023 Subordinated Bonds, or that they will so do on a timely basis or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Official Statement.

The Depository Trust Company (“DTC”) New York, NY, will act as securities depository for the 2023 Subordinated Bonds. The 2023 Subordinated Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Bond certificate will be issued for each series of the 2023 Subordinated Bonds, each in the aggregate principal amount of such series, and will be deposited with DTC.

DTC, the world’s largest depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues and money market instruments from over 100 countries that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has a Standard & Poor’s rating of AA+. The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the 2023 Subordinated Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2023 Subordinated Bonds on DTC’s records. The ownership interest of each actual purchaser of each 2023 Subordinated Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2023 Subordinated Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their beneficial ownership interests in the 2023 Subordinated

Bonds, except in the event that use of the book-entry system for the 2023 Subordinated Bonds is discontinued.

To facilitate subsequent transfers, all 2023 Subordinated Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of the 2023 Subordinated Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2023 Subordinated Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2023 Subordinated Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the 2023 Subordinated Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2023 Subordinated Bonds, such as redemptions, tenders, defaults, and proposed amendments to the bond documents. For example, Beneficial Owners of the 2023 Subordinated Bonds may wish to ascertain that the nominee holding the 2023 Subordinated Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners.

Redemption notices shall be sent to DTC. If less than all of a series of the 2023 Subordinated Bonds is being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the 2023 Subordinated Bonds of such series to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the 2023 Subordinated Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to SMUD as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2023 Subordinated Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium, redemption proceeds and interest payments on the 2023 Subordinated Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from SMUD or the Trustee, on a payment date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participants and not of DTC, its nominee, the Trustee or SMUD, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, redemption proceeds and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Trustee. Disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of the Direct and Indirect Participants.

A Beneficial Owner shall give notice to elect to have its 2023 Subordinated Bonds purchased or tendered, through its Participant, to the Underwriter, and shall effect delivery of such 2023 Subordinated Bonds by causing the Direct Participant to transfer the Participant's interest in the 2023 Subordinated

Bonds, on DTC's records, to the Underwriter. The requirement of physical delivery of 2023 Subordinated Bonds in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the 2023 Subordinated Bonds are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered 2023 Subordinated Bonds to the Underwriter's DTC account.

DTC may discontinue providing its services as depository with respect to the 2023 Subordinated Bonds at any time by giving reasonable notice to SMUD or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, bond certificates are required to be printed and delivered.

SMUD may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, bond certificates for such 2023 Subordinated Bonds will be printed and delivered to DTC.

Neither SMUD or the Trustee will have any responsibility or obligation to Participants, to Indirect Participants or to any Beneficial Owner with respect to (i) the accuracy of any records maintained by DTC, any Participant, or any Indirect Participant; (ii) the payment by DTC or any Participant or Indirect Participant of any amount with respect to the principal of or premium, if any, or interest on the 2023 Subordinated Bonds; (iii) any notice which is permitted or required to be given to Holders under the Resolution; (iv) the selection by DTC, any Participant or any Indirect Participant of any person to receive payment in the event of a partial redemption of 2023 Subordinated Bonds; (v) any consent given or other action taken by DTC as Bondholder; or (vi) any other procedures or obligations of DTC, Participants or Indirect Participants under the book-entry system.

APPENDIX D

SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION

The following is a summary of certain provisions of the Subordinate Resolution. Other provisions of the Subordinate Resolution are described under the caption “SECURITY FOR THE SUBORDINATED BONDS.” This summary is not to be considered a full statement of the terms of the Subordinate Resolution and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in the Subordinate Resolution.

Certain Definitions

“Assumed Interest Payments” means, for any fiscal year or period, interest which would accrue during such fiscal year or period on an amount equal to the then unamortized balance of the remaining sum of Assumed Principal Payments and at the interest rate on the date of such calculation on the Parity Subordinated Debt to which such Assumed Principal Payments relate.

“Assumed Interest Rate” for any Parity Bond or Parity Subordinated Debt means, for any fiscal year or period, the interest rate thereon on the date of such calculation.

“Assumed Principal Payments” means for any fiscal year or period the sum of the following amounts falling within such fiscal year or period: each Excluded Principal Payment amortized equally over the years (pro rata in the case of a partial year) in the period commencing on the stated due date for such Excluded Principal Payment and ending on the date 30 years from the date of issuance of the Parity Subordinated Debt to which such Excluded Principal Payment relates.

“Bond Debt Service” means all amounts required to be paid under the Subordinate Resolution from Net Revenues for principal, interest and reserve fund requirements on the Senior Bonds and all Parity Bonds then outstanding, as the same become due and payable.

“Defeasance Securities” shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of SMUD’s funds:

(i) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are unconditionally guaranteed by, the United States of America, including obligations of any of the federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;

(ii) any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (a) which are not callable prior to maturity or as to which irrevocable instructions have been given to the trustee of such bonds or other obligations by the obligor to give due notice of redemption and to call such bonds for redemption on the date or dates specified in such instructions, (b) which are secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or bonds or other obligations of the character described in the clause (i) above which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate, and (c) as to which the principal of and interest on the bonds and obligations of the character described in the clause (i) above which have been deposited in such fund along with any cash on deposit in such

fund are sufficient to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this clause (ii) on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate;

(iii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by any agency or corporation which has been or may thereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America; and

(iv) with respect to the defeasance of any particular series of Bonds, any other securities specified in the Supplemental Resolution providing for their issuance.

“Electric System” and “Enterprise” means the entire electric system of SMUD, together with all additions, betterments, extensions and improvements to said system or any part thereof. The entire electric system of SMUD shall be deemed to be and to constitute a single unified and integrated system for the furnishing of electric energy to consumers of SMUD and a single enterprise. The terms “Electric System” and “Enterprise” shall have the same meaning and may be used interchangeably.

“Energy Payments” means, when used with respect to the Electric System, all actual costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable for purchased power (including power purchased from any special district included within the boundaries of SMUD), electric and thermal energy and capacity and under contracts providing for payments by SMUD for electric or thermal energy or capacity whether or not such energy or capacity is delivered or capable of being delivered or otherwise made available to or received by or for the account of SMUD.

“Excluded Principal Payments” shall mean each payment of principal of Parity Subordinated Debt which the Board of Directors of SMUD determines (on a date not later than the date of issuance of such Parity Subordinated Debt) that SMUD intends to pay with moneys which are not Revenues. No such determination shall affect the security for such Parity Subordinated Debt or the obligation of SMUD to pay such payments from Revenues.

“Financial Products Agreement” means an interest rate swap, cap, collar, option, floor, forward or other hedging agreement, arrangement or security, however denominated, entered into by SMUD with a Qualified Provider not for investment purposes but with respect to specific Parity Bonds, Subordinated Bonds or Parity Subordinated Debt for the purpose of (1) reducing or otherwise managing SMUD’s risk of interest rate changes or (2) effectively converting SMUD’s interest rate exposure, in whole or in part, from a fixed rate exposure to a variable rate exposure, or from a variable rate exposure to a fixed rate exposure.

“Financial Product Payments” means payments periodically required to be paid to a counterparty by SMUD pursuant to a Financial Products Agreement. For the purpose of complying with any coverage test under the Subordinate Resolution, SMUD (or its consultant) may assume, with respect to any prospective Financial Product Payments that may adjust or vary pursuant to the terms of the related Financial Products Agreement, that the index or benchmark upon which the prospective Financial Product Payments are based shall be fixed for the prospective calculation period at the lesser of (a) the index or benchmark in effect as of the date of calculation, or (b) average rate of such index or benchmark over the most recent twelve calendar months preceding the date of calculation. If a twelve-month average index or benchmark as described in clause (b) is not calculable due to insufficient historic data or other reasons, SMUD (or its consultant) shall use the index or benchmark in effect as of the date of calculation.

“Financial Product Receipts” means amounts periodically required to be paid to SMUD by a counterparty pursuant to a Financial Products Agreement. For the purpose of complying with any coverage

test under the Subordinate Resolution, SMUD (or its consultant) may assume, with respect to any prospective Financial Product Receipts that may adjust or vary pursuant to the terms of the related Financial Products Agreement, that the index or benchmark upon which the prospective Financial Product Receipts are based shall be fixed for the prospective calculation period at the lesser of (a) the index or benchmark in effect as of the date of calculation, or (b) average rate of such index or benchmark over the most recent twelve calendar months preceding the date of calculation. If a twelve-month average index or benchmark as described in clause (b) is not calculable due to insufficient historic data or other reasons, SMUD (or its consultant) shall use the index or benchmark in effect as of the date of calculation.

“Maintenance and Operation Costs” means, when used with respect to the Electric System, all actual maintenance and operation costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable, but only if said charges are made in conformity with generally accepted accounting principles, and exclusive in all cases of depreciation or obsolescence charges or reserves therefor, amortization of intangibles or other bookkeeping entries of a similar nature, and also exclusive of all interest charges and charges for the payment of principal, or amortization, of bonded or other indebtedness of SMUD.

Such maintenance and operation costs of the Electric System include, generally, purchased power (including power purchased from any special district included within the boundaries of SMUD), and such part of the cost of fuel of any type or character (including nuclear fuel), taxes, salaries and wages, fees for services, materials and supplies, rents, office supplies and all other costs as are charged directly or apportioned to the operation and maintenance of the generation, transmission and distribution system, customer accounts, sales and administrative functions, or to the general operation of SMUD. Said term does not include costs, or charges made therefor, for capital additions, replacements, betterments, extensions or improvements to or retirements from the Electric System, which under generally accepted accounting principles are properly chargeable to the capital account or the reserve for depreciation, and does not include losses from the sale, abandonment, reclassification, revaluation or other disposition of any properties of SMUD nor such property items, including taxes and fuel, which are capitalized pursuant to the then existing accounting practice of SMUD.

“Net Revenues” for any fiscal period means the sum of (a) the Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by SMUD from the Rate Stabilization Fund for treatment as Revenues for such fiscal period, less the sum of (c) all Maintenance and Operation Costs for such fiscal period, (d) all Energy Payments for such fiscal period not included in Maintenance and Operation Costs for such fiscal period, and (e) the amounts, if any, withdrawn by SMUD from Revenues for such fiscal period for deposit in the Rate Stabilization Fund pursuant to the Subordinate Resolution.

“Net Subordinated Revenues” means Net Revenues less Bond Debt Service.

“Parity Bonds” includes the Senior Bonds and all revenue bonds issued on a parity with the Senior Bonds as provided or permitted in the Senior Bond Resolution. No Parity Bonds (other than the Senior Bonds) are currently outstanding.

“Parity Subordinated Debt” means the Subordinated Bonds and all revenue bonds of SMUD having an equal lien and charge upon Net Subordinated Revenues and therefore payable on a parity with the Subordinated Bonds and junior to the Parity Bonds.

“Qualified Provider” means any counterparty to a Financial Products Agreement if the unsecured long-term debt obligations of such counterparty (or of the parent or a subsidiary of such counterparty if such parent or subsidiary unconditionally guarantees the performance of such counterparty under such Financial Products Agreement and the Trustee receives an opinion of counsel to the effect that such guarantee is a valid and binding agreement of such parent or subsidiary), or obligations secured or supported by a letter of credit, contract, guarantee, agreement, insurance policy or surety bond issued by such counterparty (or such guarantor parent or subsidiary), are rated in one of the three highest rating categories of a national rating agency (without regard to any gradation or such rating category) at the time of the execution and delivery of the Financial Products Agreement.

“Revenues” means all charges received for, and all other income and receipts derived by SMUD from, the operation of the Electric System, or arising from the Electric System, including income derived from the sale or use of electric energy generated, transmitted or distributed by any facilities of the Electric System, together with any receipts derived from the sale of any property pertaining to the Electric System or incidental to the operation of the Electric System or from any services performed by SMUD in connection with or incidental to the Electric System, or from any other source whatsoever directly or indirectly derived from the Electric System, but exclusive in every case of any moneys derived from the levy or collection of taxes upon any taxable property in SMUD.

The term “Revenues” also includes any income or revenues derived from the wholesale sale of water developed by the White Rock Project (as defined in Resolution No. 4775), or the Upper American River Project (as defined in Resolution No. 4938), but does not include revenues or income derived from the retail distribution of water through any distribution facility thereafter acquired by SMUD.

The term “Revenues” also includes all interest, profits or other income derived from the investment of any moneys in any fund or account established under the Subordinate Resolution or the Senior Bond Resolution.

Additional Covenants

The Subordinate Resolution contains the following additional covenants, among others:

- (a) That the Electric System will be maintained in good repair, working order and condition at all times, and will be continuously operated in an efficient and economical manner.
- (b) That SMUD will comply with all lawful orders of any governmental agency or authority having jurisdiction in the premises (except while the validity or application thereof is being contested in good faith).
- (c) That proper records and accounts will be maintained of all transactions relating to the Electric System and the Revenues (open to inspection by the Trustee and the Holders of not less than 10 percent in principal amount of the Subordinated Bonds), to be audited annually by an independent certified public accountant within 90 days after close of the fiscal year, and copies of such financial statements supplied to Bondholders on request.

Tax Covenants

SMUD agrees in the Subordinate Resolution not to take any action which would result in interest on the 2023 Subordinated Bonds not being excluded from gross income for federal income tax purposes. SMUD also agrees to establish a separate Rebate Fund for the 2023 Subordinated Bonds and to deposit therein such amounts as are necessary to make the required rebate payments to the United States

Government under the Internal Revenue Code of 1986. Such deposits will be made from any Revenues legally available to SMUD after payment of maintenance and operation costs and Energy Payments, principal of and interest on the Parity Bonds, principal of and interest on the Subordinated Bonds, and any other obligations secured by the Revenues. Amounts in the Rebate Fund, and any earnings thereon, shall be paid to the United States Government as provided in the Tax Certificate.

Amendment of the Subordinate Resolution

The Subordinate Resolution and the rights and obligations of SMUD and of the Holders of the Subordinated Bonds may be modified or amended at any time pursuant to the affirmative vote at a meeting of Bondholders, or with the written consent without a meeting, of the Holders of 60% in aggregate principal amount of the Subordinated Bonds then outstanding, provided that no such modification or amendment shall (i) extend the fixed maturity of any Subordinated Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon or reduce any premium payable upon the redemption thereof, without the consent of the Holder of each Subordinated Bond so affected, or (ii) reduce the aforesaid percentage of Subordinated Bonds required for consent to an amendment or modification, without the consent of the Holders of all the Subordinated Bonds then outstanding. Modifications or amendments may be made, without the consent of any Bondholders, to add covenants of SMUD or to surrender rights reserved by SMUD in the Subordinate Resolution, to cure ambiguities or defective or inconsistent provisions or in regard to questions arising under the Subordinate Resolution without adversely affecting the interests of the Bondholders, or to provide for the issuance of a Series of Subordinated Bonds, subject to the provisions contained in the Subordinate Resolution with respect thereto.

Events of Default and Remedies of Bondholders

Events of Default. The Subordinate Resolution declares each of the following to be an event of default:

- (a) Failure to pay the principal of and premium on any Subordinated Bond when due and payable;
- (b) failure to pay any installment of interest on any Subordinated Bond when due and payable, if such default continues for a period of 30 days;
- (c) if the principal of any Parity Bonds shall be declared to be due and payable on account of the occurrence of a default under or breach of the terms thereof or the Senior Bond Resolution or a similar instrument; and
- (d) if, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of SMUD or of the whole or any substantial part of its property, and such custody or control shall not be terminated or stayed within 60 days.

then and in each and every case during the continuance of such event of default, the Trustee or the Holders of not less than a majority in aggregate principal amount of the Subordinated Bonds at the time outstanding shall be entitled, upon notice in writing to SMUD, to declare the principal of all of the Subordinated Bonds then outstanding, and the interest accrued thereon, to be due and payable immediately, and upon any such declaration the same shall become and shall be immediately due and payable, anything in the Subordinate Resolution or in the Subordinated Bonds contained to the contrary notwithstanding.

Trustee to Represent Subordinated Bondholders. The Trustee is appointed as trustee to represent the Subordinated Bondholders in the matter of exercising and prosecuting on their behalf such rights and

remedies as may be available to such Holders under the provisions of the Subordinated Bonds and the Subordinate Resolution, as well as under the Act or other provisions of applicable law. Upon any default or other occasion giving rise to a right of the Trustee to represent the Subordinated Bondholders, the Trustee may take such action as may seem appropriate to it, and, upon the request in writing of the Holders of twenty-five percent (25%) in aggregate principal amount of the Subordinated Bonds then outstanding, which request shall specify such default or occasion and the action to be taken by the Trustee, and upon being furnished with indemnity satisfactory to it, the Trustee shall take such action on behalf of the Bondholders as may have been requested.

Remedies. In case one or more of the events of default shall happen, then and in every such case the Holder of any Subordinated Bond at the time outstanding shall be entitled to proceed to protect and enforce the rights vested in such Holder by the Subordinate Resolution by such appropriate judicial proceeding as such Holder shall deem most effectual to protect and enforce any such right, either by suit in equity or by action at law, whether for the specific performance of any covenant or agreement contained in the Subordinate Resolution, or in aid of the exercise of any powers granted in the Subordinate Resolution, or to enforce any other legal or equitable right vested in the Holders of Subordinated Bonds by the Subordinate Resolution or by law

Distribution of Assets. Upon any distribution of assets of SMUD upon any dissolution, winding up, liquidation or reorganization of SMUD, whether in bankruptcy, insolvency, reorganization or receivership proceedings or upon an assignment for the benefit of creditors or any other marshalling of the assets and liabilities of SMUD or upon any acceleration of maturity of the Subordinated Bonds by declaration or otherwise,

(a) the holders of all Parity Bonds shall first be entitled to receive payment in full of the principal thereof (and premium, if any) and interest due thereon, or provision shall be made for such payment in cash, before the Holders of the Subordinated Bonds are entitled to receive any payment on account of the principal of (or premium, if any) or interest on the indebtedness evidenced by the Subordinated Bonds;

(b) any payment by, or distribution of assets of, SMUD of any kind or character, whether in cash, property or securities, to which the Holders of the Subordinated Bonds or the Trustee would be entitled except for the provisions of the Subordinate Resolution shall be paid or delivered by the person making such payment or distribution, whether a trustee in bankruptcy, a receiver or liquidating trustee or otherwise, directly to the holders of Parity Bonds or their representative or representatives or to the trustee or trustees under the Senior Bond Resolution or any similar instrument under which any instruments evidencing any of such Parity Bonds may have been issued, ratably according to the aggregate amounts remaining unpaid on account of the Parity Bonds held or represented by each, to the extent necessary to make payment in full of all Parity Bonds remaining unpaid after giving effect to any concurrent payment or distribution (or provision therefor) to the holders of such Parity Bonds; and

(c) in the event that, notwithstanding the foregoing, any payment by, or distribution of assets of, SMUD of any kind or character, whether in cash, property or securities shall be received by the Trustee or the Holders of the Subordinated Bonds before all Parity Bonds are paid in full, such payment or distribution shall be held in Trust for the benefit of, and shall be paid over to the holders of such Parity Bonds or their representative or representatives or to the trustee or trustees under the Subordinate Resolution or any similar instrument under which any instruments evidencing any of such Parity Bonds may have been issued, ratably as aforesaid, for application to the payment of all Parity Bonds remaining unpaid until all such Parity Bonds shall have been paid in full, after giving effect to any concurrent payment or distribution (or provision therefor) to the holders of such Parity Bonds.

Discharge of Subordinate Resolution

The Subordinate Resolution may be discharged by depositing with the Trustee in trust, moneys or Defeasance Securities, in such amount as the Trustee shall determine will, together with the interest to accrue thereon, be fully sufficient to pay and discharge the indebtedness on all Subordinated Bonds at or before their respective maturity dates.

APPENDIX E

SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION

The following is a summary of certain provisions of the Senior Bond Resolution. This summary is not to be considered a full statement of the terms of the Senior Bond Resolution and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in the Senior Bond Resolution.

Between July 1997 and August 2003, SMUD received consents to amend the Senior Bond Resolution from the owners of the requisite percentage of Outstanding Senior Bonds. Pursuant to the authority granted by such consents, SMUD amended the Senior Bond Resolution in October 2003 by adopting the Forty-Eighth Supplemental Resolution and the Forty-Ninth Supplemental Resolution. The following summary of the Senior Bond Resolution reflects such amendments.

Certain Definitions

“Energy Payments” means, when used with respect to the Electric System, all actual costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable for purchased power (including power purchased from any special district included within the boundaries of SMUD), electric and thermal energy and capacity under contracts providing for payments by SMUD for electric or thermal energy or capacity whether or not such energy or capacity is delivered or capable of being delivered or otherwise made available to or received by or for the account of SMUD.

“Net Revenues” for any fiscal period means the sum of (a) the Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by SMUD from the Rate Stabilization Fund for treatment as Revenues for such fiscal period, less the sum of (c) all Maintenance and Operation Costs for such fiscal period, (d) all Energy Payments for such fiscal period not included in Maintenance and Operation Costs for such fiscal period, and (e) the amounts, if any, withdrawn by SMUD from Revenues for such fiscal period for deposit in the Rate Stabilization Fund pursuant to the Senior Bond Resolution.

“Parity Bonds” includes the Senior Bonds and all revenue bonds issued on a parity with the Senior Bonds as provided or permitted in the Senior Bond Resolution. No Parity Bonds (other than the Senior Bonds) are currently outstanding.

“Revenues” means all charges received for, and all other income and receipts derived by SMUD from, the operation of the Electric System, or arising from the Electric System, including income derived from the sale or use of electric energy generated, transmitted or distributed by any facilities of the Electric System, together with any receipts derived from the sale of any property pertaining to the Electric System or incidental to the operation of the Electric System or from any services performed by SMUD in connection with or incidental to the Electric System, or from any other source whatsoever directly or indirectly derived from the Electric System, but exclusive in every case of any moneys derived from the levy or collection of taxes upon any taxable property in SMUD.

The term “Revenues” also includes any income or revenues derived from the wholesale sale of water developed by the White Rock Project (as defined in Resolution No. 4775), or the Upper American River Project (as defined in Resolution No. 4938), but does not include revenues or income derived from the retail distribution of water through any distribution facility thereafter acquired by SMUD. The term “Revenues” also includes all interest, profits or other income derived from the investment of any moneys in any fund or account established under the Senior Bond Resolution.

Allocation of Revenues

After making an allocation of Revenues to Maintenance and Operation Costs and to Energy Payments not included in Maintenance and Operation Costs, the Treasurer of SMUD is required (subject to the last paragraph of this section) to set aside, on an equal priority with sums set aside for all other Parity Bonds, Net Revenues as follows:

First: To the Electric Revenue Bond Interest Fund, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-fifth (1/5) of the aggregate amount of interest becoming due on the Senior Bonds on the next succeeding semiannual interest payment date, until an amount sufficient to meet said interest payment is accumulated.

Second: To the Electric Revenue Bond Redemption Fund, to be set aside in the Principal Account and Sinking Fund, respectively, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-tenth (1/10) of the aggregate amount of principal becoming due on serial Senior Bonds and the aggregate minimum sinking fund payments required to be made with respect to term Senior Bonds during the next ensuing 12 months, until an amount sufficient to meet the principal and sinking fund requirements on all Senior Bonds outstanding is accumulated in said accounts, respectively.

Third: To the Electric Revenue Bond Reserve Fund, such amounts as any supplemental resolution authorizing the issuance of a series of Senior Bonds may require to build up and maintain said fund.

If interest on Senior Bonds of a series or maturity is payable more frequently than semiannually, the Treasurer of SMUD shall set aside out of Net Revenues in the Interest Fund such amounts as may be required to pay interest on the Senior Bonds of such series or maturity on each interest payment date at least one month prior to such interest payment date. Allocation to the Electric Revenue Bond Redemption Fund and Electric Revenue Bond Reserve Fund shall be made as set forth above.

All remaining Revenues, after making the foregoing allocations, will be available to SMUD for all lawful SMUD purposes. Such remaining Revenues will be used for the purpose of, among other things, making any required deposits to the Rebate Fund. See "Tax Covenants."

Reserve Fund

The Electric Revenue Bond Reserve Fund is a parity reserve fund for the equal benefit of all Parity Bonds outstanding. Moneys in such fund (except any excess over the required balance which may be withdrawn and used for any SMUD use) shall be used solely for the purpose of making good any deficiency in any fund established for the payment of interest, principal or sinking fund payments pursuant to the Senior Bond Resolution or any resolution authorizing the issuance of any Parity Bonds.

The Electric Revenue Bond Reserve Fund is required to be maintained in an amount such that the amount in the combined reserve funds of all Parity Bonds then outstanding will at no time be less than the current annual interest requirements on all then outstanding Parity Bonds (except bonds for which payment has been provided in advance). If SMUD's debt service ratio in any fiscal year (the ratio of Net Revenues

during said fiscal year to maximum annual debt service during the period of three fiscal years next following said fiscal year on all Parity Bonds then outstanding) shall fall below 1.40, there shall be set aside in the reserve funds from the first available Net Revenues not less than 15 percent of the total current monthly interest requirements of all Parity Bonds until the debt service ratio again exceeds 1.40, or until the aggregate amount on deposit in the reserve funds is equal to the maximum annual debt service on all Parity Bonds, whichever occurs first. The combined reserve funds cannot be required to exceed the maximum annual debt service on all outstanding Parity Bonds.

Rates and Charges

SMUD has covenanted in the Senior Bond Resolution to establish and at all times maintain and collect rates and charges for the sale or use of electric energy generated, transmitted, distributed or furnished by SMUD which, together with certain items of other income permitted under the Senior Bond Resolution, will yield Revenues at least sufficient, with respect to the ensuing 12 months, to pay and provide for all sums required for Maintenance and Operation Costs and Energy Payments not included in Maintenance and Operation Costs and, in addition, to provide an aggregate sum equal to at least 1.20 times the total amount required for the payment of principal and interest, together with any sinking fund or reserve fund payments, on all Parity Bonds, in each case during such 12 months.

SMUD has full power to establish rates and charges for all SMUD services, and the levels of such rates are not subject to review or regulation by any other governmental agency, either federal or state.

Limitations on Additional Obligations Payable from Revenues

The Senior Bond Resolution provides that SMUD will not, so long as any Senior Bonds are outstanding, issue any obligations payable in whole or in part from Revenues except the following:

- (a) Senior Bonds of any series authorized pursuant to the Senior Bond Resolution;
- (b) Refunding bonds issued solely to refund all or part of the Parity Bonds;
- (c) General obligation bonds or other securities secured by the full faith and credit of SMUD;
- (d) Additional revenue bonds (including additional Parity Bonds), payable on a parity with the Senior Bonds, with an equal lien and charge upon the Revenues, but only subject to the following conditions:
 - (1) Such additional revenue bonds shall have been authorized;
 - (2) The proceedings for the issuance of such additional revenue bonds shall require SMUD to fix and collect rates and charges in an amount not less, with respect to such bonds, than the amounts required with respect to Senior Bonds issued under the Senior Bond Resolution;
 - (3) SMUD shall not then be in default under the Senior Bond Resolution or other resolutions authorizing the issuance of Parity Bonds; and

(4) A certificate of SMUD, certifying--

(1) that the Net Revenues, after the completion of the additions, betterments, extensions or improvements proposed to be financed from the proceeds of such additional revenue bonds, will be sufficient to pay the principal of and interest (and bond reserve fund requirements, if any) on all Parity Bonds then outstanding and on such additional revenue bonds then proposed to be issued, and

(2) that the Net Revenues, for a period of twelve consecutive months during the twenty-four months immediately preceding the date upon which such additional revenue bonds will become outstanding, have been at least equal to 1.25 times the sum of

- (i) the annual interest,
- (ii) the principal amount of serial bonds falling due, and
- (iii) the amount of minimum sinking fund payments required for the payment of term bonds,

as computed for the year in which such sum shall then be a maximum, including both the then outstanding Parity Bonds and the additional revenue bonds then proposed to be issued, provided that--

(A) if rates and charges in effect on the date upon which such additional revenue bonds will become outstanding will be greater than those in effect during the entire twelve months elected for the foregoing computation, then the Net Revenues for said period of twelve months may be augmented by 75% of the estimated increase in Net Revenues computed to accrue to the Electric System in the first twelve months during which such rates and charges shall be in effect; and

(B) if such additional revenue bonds or any thereof shall be issued for the purpose of acquiring an existing revenue-producing electric system, 75% of the estimated pro forma net revenues of such existing system (calculated on the basis of assumed SMUD ownership and operation during such period but otherwise on the basis of actual gross revenues of such existing system at the rates actually charged therefor) for the preceding twelve months may be added to the actual Net Revenues of the Electric System for the twelve months elected for said computation and treated as if actually received by the Electric System during those twelve months; and

(e) Revenue bonds junior and subordinate to the Parity Bonds.

Additional Covenants

The Senior Bond Resolution contains the following additional covenants, among others:

(a) SMUD will cause the Electric System to be maintained in good repair, working order and condition at all times, and will continuously operate the Electric System in an efficient and economical manner, and so that all lawful orders of any governmental agency or authority having jurisdiction in the premises shall be complied with, but SMUD shall not be required to comply with any such orders so long as the validity or application thereof shall be contested in good faith.

SMUD further covenants and agrees that it will at all times, while any of the Bonds are outstanding maintain and comply with all necessary permits and licenses issued by the Atomic Energy Commission.

(b) None of the electric energy owned, controlled or supplied by SMUD shall be furnished or supplied free, but on the contrary shall always be sold or furnished so as to produce Revenues.

If SMUD shall sell water developed or made available by the Electric System, a reasonable charge therefor shall be made and the revenue received by SMUD therefrom shall be Revenues and accounted for as such, except that SMUD may furnish water developed or impounded by the Electric System for any purpose (other than the use of such water for hydroelectric purposes) without charge as SMUD in its discretion deems advisable if such water is so furnished without any distribution cost to SMUD. SMUD may sell any water for consumption for domestic or other purposes (exclusive of the use thereof for hydroelectric purposes), but SMUD shall charge itself a reasonable wholesale rate for any water sold by SMUD. SMUD also may sell water at wholesale to any other person, for distribution by such other person for domestic or other purposes (except use for hydroelectric purposes), and SMUD shall likewise charge a reasonable wholesale rate to any such other person. In each case, all such wholesale rates shall be included in Revenues. The revenue received by SMUD from any retail sale of water distributed by SMUD shall not be deemed Revenues, but shall be available to SMUD for any SMUD purpose.

(c) That all taxes and governmental charges and other lawful claims which might become a lien on the Electric System or the Revenues or impair the security of the Senior Bonds will be paid and discharged when due.

(d) SMUD will not sell or otherwise dispose of any property essential to the proper operation of the Electric System or to the maintenance of the Revenues. SMUD will not enter into any lease or agreement which impairs or impedes the operation of the Electric System or which otherwise impairs or impedes the rights of the Bondholders with respect to Revenues. Nothing contained in the Senior Bond Resolution shall prevent SMUD from entering into sale and leaseback agreements pursuant to which SMUD may acquire the use of property subject to the terms of such sale and leaseback agreements.

(e) That insurance adequate in amounts and as to risks covered will be maintained against such risks as are usually insurable in connection with similar electric systems, and in addition public liability and property damage insurance in amounts not less than \$1,000,000 per accident and adequate fidelity bonds on all officers and employees of SMUD handling or responsible for SMUD funds, subject in each case to the condition that such insurance is obtainable at reasonable rates and upon reasonable terms and conditions. See "Insurance" for a description of SMUD's insurance.

(f) That the net proceeds realized by SMUD in the event all or any part of the Electric System is taken by eminent domain proceedings will be applied to the redemption or retirement of all Parity Bonds if sufficient therefor, and, if not, then pro rata to the redemption or retirement of Parity Bonds or to new facilities if the additional Revenues to be derived therefrom will sufficiently offset the loss of Revenues resulting from such eminent domain so that the ability of SMUD to meet its obligations will not be substantially impaired.

(g) That SMUD will at all times use its best efforts to maintain the powers, functions and duties now reposed in it pursuant to law.

(h) That SMUD will establish and at all times maintain and collect rates and charges for the sale or use of its electric energy sufficient to permit SMUD to purchase power or issue and sell Parity Bonds to finance additions, betterments, extensions and improvements to the Electric System as may be reasonably necessary to satisfy its then projected electric demand upon its Electric System, and that unless the Board determines that SMUD will be able to satisfy such demand through the purchase of electric energy, SMUD will proceed with all reasonable diligence to issue and sell such Parity Bonds.

Tax Covenants

SMUD agrees in the Senior Bond Resolution not to take any action which would result in interest on the Senior Bonds not being excluded from gross income for federal income tax purposes. SMUD also agrees to establish a separate Rebate Fund for the Senior Bonds and to deposit therein such amounts as are necessary to make the required rebate payments to the United States Government under the Internal Revenue Code of 1986. Such deposits will be made from any Revenues legally available to SMUD after payment of maintenance and operation costs and Energy Payments, principal of and interest on the Parity Bonds and any other obligations secured by the Revenues. Amounts in the Rebate Fund, and any earnings thereon, shall be paid to the United States Government as provided in the Tax Certificate.

Amendment of the Senior Bond Resolution

The Senior Bond Resolution and the rights and obligations of SMUD and of the Holders of the Senior Bonds may be modified or amended at any time pursuant to the affirmative vote at a meeting of Bondholders, or with the written consent without a meeting, of the Holders of 60 percent in aggregate principal amount of the Senior Bonds then outstanding, provided that no such modification or amendment shall (i) extend the fixed maturity of any Senior Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon or reduce any premium payable upon the redemption thereof, without the consent of the Holder of each Senior Bond so affected, or (ii) reduce the aforesaid percentage of Senior Bonds required for consent to an amendment or modification, without the consent of the Holders of all the Senior Bonds then outstanding. Modifications or amendments may be made, without the consent of any Bondholders, to add covenants of SMUD or to surrender rights reserved by SMUD in the Senior Bond Resolution, to cure ambiguities or defective or inconsistent provisions or in regard to questions arising under the Senior Bond Resolution without adversely affecting the interests of the Bondholders, or to provide for the issuance of a Series of Senior Bonds, subject to the provisions contained in the Senior Bond Resolution with respect thereto.

Events of Default and Remedies of Bondholders

The Senior Bond Resolution declares each of the following to be an event of default:

- (a) Failure to pay the principal of and premium on any Senior Bond when due and payable;
- (b) Failure to pay any installment of interest on any Senior Bond when due and payable, if such default continues for a period of 30 days;
- (c) Default by SMUD in the observance of any of the covenants, agreements or conditions on its part in the Senior Bond Resolution or in the Senior Bonds, if such default continues for a period of 60 days after written notice thereof (specifying such default and requiring the same to be remedied) has been given to SMUD by the Trustee, or to SMUD and the Trustee by the Holders of not less than 25 percent in aggregate principal amount of the Senior Bonds at the time outstanding; and
- (d) If, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of SMUD or of the whole or any substantial part of its property, and such custody or control shall not be terminated or stayed within 60 days.

In the event of default, the Trustee or the Holders of not less than a majority in aggregate principal amount of the outstanding Senior Bonds may, upon written notice to SMUD, declare the principal of all outstanding Senior Bonds, and the interest accrued thereon, to be due and payable immediately. The Trustee is appointed as trustee to represent Bondholders and may take such action as may seem appropriate to it,

and, upon the written request of the Holders of 25 percent in aggregate principal amount of the outstanding Senior Bonds, and upon being furnished with indemnity satisfactory to it, will take such action on behalf of Bondholders as is specified in such written request. Each Bondholder is entitled to proceed to protect and enforce the rights vested in such Holder by the Senior Bond Resolution by such appropriate judicial proceedings as such Holder deems most effectual.

The rights of Bondholders are limited and restricted to the use and application of Revenues as provided in the Senior Bond Resolution and do not extend to the levy of any attachment or execution upon or forfeiture of any of the properties of SMUD or to any moneys derived by SMUD from the levy or collection of taxes.

In addition to the limitations on remedies contained in the Senior Bond Resolution, the rights and remedies provided by the Senior Bonds and the Senior Bond Resolution, as well as the enforcement by SMUD of contracts with customers of the Electric System, may be limited by and are subject to bankruptcy, insolvency, reorganization and other laws affecting the enforcement of creditors' rights.

Discharge of Senior Bond Resolution

The Senior Bond Resolution may be discharged by depositing with the Trustee in trust, moneys or Federal Securities or general obligation bonds of the State of California, in such amount as the Trustee shall determine will, together with the interest to accrue thereon, be fully sufficient to pay and discharge the indebtedness on all Senior Bonds at or before their respective maturity dates.

APPENDIX F

PROPOSED FORM OF LEGAL OPINION FOR 2023 SUBORDINATED BONDS

[Closing Date]

Sacramento Municipal Utility District
Sacramento, California

Sacramento Municipal Utility District Subordinated Electric Revenue Bonds,
2023 Series D and 2023 Series E
and
Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds,
2023 Series F
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the Sacramento Municipal Utility District (“SMUD”) in connection with the issuance of \$ _____ aggregate principal amount of its Subordinated Electric Revenue Bonds, 2023 Series D, Subordinated Electric Revenue Bonds, 2023 Series E and its Subordinated Electric Revenue Refunding Bonds, 2023 Series F (collectively, the “2023 Subordinated Bonds”), issued pursuant to Resolution No. 85-11-1 of the Board of Directors of SMUD, adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted June 21, 2001 (the “Subordinate Master Resolution”), as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. 23-05-[], adopted May 19, 2023 (the “Fifteenth Supplemental Resolution”), Resolution No. 23-05-[], adopted May 19, 2023 (the “Sixteenth Supplemental Resolution”) and Resolution No. 23-05-[] (the “Seventeenth Supplemental Resolution”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution.

In such connection, we have reviewed the Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after original delivery of the 2023 Subordinated Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after original delivery of the 2023 Subordinated Bonds on the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. Our engagement with respect to the 2023 Subordinated Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal

conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Resolution and the Tax Certificate, including (without limitation), covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the 2023 Subordinated Bonds to be included in gross income for federal income tax purposes.

We call attention to the fact that the rights and obligations under the 2023 Subordinated Bonds, the Resolution and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against governmental entities such as SMUD. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement, dated __, 2023, or other offering material relating to the 2023 Subordinated Bonds and express no opinion or view with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The 2023 Subordinated Bonds constitute the valid and binding limited obligations of SMUD.

2. The Resolution, including the Fifteenth Supplemental Resolution, the Sixteenth Supplemental Resolution and the Seventeenth Supplemental Resolution, has been duly adopted by, and constitutes the valid and binding obligation of, SMUD. The Resolution creates a valid pledge, to secure the payment of the principal of and interest on the 2023 Subordinated Bonds, of the Net Subordinated Revenues, subject to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution.

3. Interest on the 2023 Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Interest on the 2023 Subordinated Bonds is not a specific preference item for purposes of the federal individual alternative minimum tax. We observe that, for tax years beginning after December 31, 2022, interest on the 2023 Subordinated Bonds included in adjusted financial statement income of certain corporations is not excluded from the federal corporate alternative minimum tax. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2023 Subordinated Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP

per

APPENDIX G

FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the “Disclosure Agreement”) is executed and delivered by the Sacramento Municipal Utility District (the “Issuer”) and U.S. Bank Trust Company, National Association in its capacity as Dissemination Agent (the “Dissemination Agent”) in connection with the issuance of \$_____ aggregate principal amount of the Issuer’s Subordinated Electric Revenue Bonds, 2023 Series D (the “2023D Subordinated Bonds”), \$_____ aggregate principal amount of the Issuer’s Subordinated Electric Revenue Bonds, 2023 Series E (the “2023E Subordinated Bonds”) and \$_____ aggregate principal amount of the Issuer’s Subordinated Electric Revenue Refunding Bonds, 2023 Series F (the “2023F Subordinated Bonds” and, together with the 2023D Subordinated Bonds and the 2023E Subordinated Bonds, the “2023 Subordinated Bonds”). The 2023 Subordinated Bonds are being issued pursuant to the Issuer’s Resolution No. 85-11-1, adopted on November 7, 1985, as amended and restated by Resolution No. 01-06-10 (the “Subordinate Master Resolution”), as supplemented by supplemental resolutions, including Resolution No. 23-05-[], adopted on May 19, 2023 (the “Fifteenth Supplemental Resolution”), Resolution No. 23-05-[], adopted on May 19, 2023 (the “Sixteenth Supplemental Resolution”) and Resolution No. 23-05-[], adopted on May 19, 2023 (the “Seventeenth Supplemental Resolution”). The Subordinate Master Resolution and all supplemental resolutions, including the Fifteenth Supplemental Resolution, the Sixteenth Supplemental Resolution and the Seventeenth Supplemental Resolution, are collectively referred to herein as the “Subordinate Resolution.” Pursuant to Sections [], [] and [] of the Subordinate Resolution, the Issuer and the Dissemination Agent covenant and agree as follows:

SECTION 1. Purpose of the Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Issuer and the Dissemination Agent for the benefit of the Holders and Beneficial Owners of the 2023 Subordinated Bonds and in order to assist the Participating Underwriters in complying with S.E.C. Rule 15c2-12(b)(5).

SECTION 2. Definitions. In addition to the definitions set forth in the Subordinate Resolution, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

“Annual Report” shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

“Beneficial Owner” shall mean any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2023 Subordinated Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

“Disclosure Representative” shall mean the Treasurer of the Issuer or his or her designee, or such other officer or employee as the Issuer shall designate in writing to the Trustee from time to time.

“Dissemination Agent” shall mean U.S. Bank Trust Company, National Association, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the Issuer and which has filed with the Trustee a written acceptance of such designation.

“EMMA” shall mean the MSRB’s Electronic Municipal Market Access system.

“Financial Obligation” shall mean, for purposes of the Listed Events set out in Section 5(a)(15) and Section 5(a)(16), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged

as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.

“MSRB” shall mean the Municipal Securities Rulemaking Board.

“Participating Underwriter” shall mean any of the original underwriters of the 2023 Subordinated Bonds required to comply with the Rule in connection with offering of the 2023 Subordinated Bonds.

“Repository” shall mean the MSRB through EMMA or any other entity or system designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule.

“Rule” shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

“State” shall mean the State of California.

SECTION 3. Provision of Annual Reports.

(a) The Issuer shall, or shall cause the Dissemination Agent to, not later than one hundred eighty (180) days after the end of the Issuer’s fiscal year (presently December 31), commencing with the report for the 2023 Fiscal Year, provide to each Repository an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may include by reference other information as provided in Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date. If the fiscal year changes for the Issuer, the Issuer shall give notice of such change in the same manner as for a Listed Event under Section 5 hereof.

(b) Not later than fifteen (15) Business Days prior to the dates specified in subsection (a) for providing the Annual Report to each Repository, the Issuer shall provide its respective Annual Report to the Dissemination Agent. If by such date, the Dissemination Agent has not received a copy of the Annual Report from the Issuer, the Dissemination Agent shall contact the Issuer to determine if the Issuer is in compliance with the first sentence of this subsection (b).

(c) If the Dissemination Agent is unable to verify that an Annual Report of the Issuer has been provided to each Repository by the date required in subsection (a), the Dissemination Agent shall send a notice to each Repository and the MSRB (if the MSRB is not a Repository) in substantially the form attached as Exhibit A.

(d) The Dissemination Agent shall:

(1) determine each year prior to the date for providing the Annual Report the name and address of each Repository and then-applicable rules and procedures for filing the Annual Report with each Repository, if any; and

(2) file a report with the Issuer certifying that the Annual Report has been provided pursuant to this Disclosure Agreement, stating the date it was provided and listing each Repository to which it was provided.

SECTION 4. Content of Annual Reports.

(a) The Issuer's Annual Report shall contain or include by reference the following:

(1) The audited financial statements of the Issuer for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board and where not in conflict with the Financial Accounting Standards Board ("FASB") pronouncements or accounting principles prescribed by FASB. If the Issuer's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.

(2) An update of the following types of information contained in Appendix A to the official statement, dated __, 2023 and related to the 2023 Subordinated Bonds:

(i) The table entitled "Power Supply Resources."

(ii) The table entitled "Projected Requirements and Resources to Meet Load Requirements."

(iii) The table entitled "Average Class Rates" (to the extent such table relates to rates and revenues of the Issuer).

(iv) The table entitled "Selected Operating Data."

(v) The table entitled "Unconsolidated Financial Data."

(vi) The balance in the Decommissioning Trust Fund, the current estimate of decommissioning costs, the decommissioning costs to date, and the annual contribution level to the Decommissioning Trust Fund, all relating to the Rancho Seco Nuclear Power Plant.

(vii) The table entitled "Estimated Capital Requirements."

(b) Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Issuer or public entities related thereto, which have been submitted to each Repository or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the MSRB. The Issuer shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Listed Events.

(a) Pursuant to the provisions of this Section 5, the Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the 2023 Subordinated Bonds not later than ten (10) business days after the occurrence of the event:

- (1) principal and interest payment delinquencies;
- (2) non-payment related defaults, if material;
- (3) unscheduled draws on any applicable debt service reserves reflecting financial difficulties;
- (4) unscheduled draws on credit enhancement reflecting financial difficulties;
- (5) substitution of credit or liquidity providers, or their failure to perform;
- (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701 TEB) or other material notices or determinations with respect to the tax status of the 2023 Subordinated Bonds or other material events adversely affecting the tax status of the 2023 Subordinated Bonds;
- (7) modifications to rights of Bondholders, if material;
- (8) bond calls, if material, and tender offers;
- (9) defeasances;
- (10) release, substitution or sale of property securing repayment of the 2023 Subordinated Bonds, if material;
- (11) rating changes;
- (12) bankruptcy, insolvency, receivership or similar event of the Issuer;
- (13) the consummation of a merger, consolidation, or acquisition involving the Issuer or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
- (14) appointment of a successor or additional trustee or the change of name of the Trustee, if material;
- (15) incurrence of a Financial Obligation of the Issuer, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Issuer, any of which affect Bondholders, if material; and
- (16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Issuer, any of which reflect financial difficulties.

(b) For the purpose of the event identified in Section 5(a)(12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Issuer in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Issuer, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court

or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Issuer.

(c) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event, the Issuer shall as soon as possible determine if such event is required to be reported pursuant to this Section 5.

(d) If the Issuer has determined that such event is required to be reported pursuant to this Section 5, the Issuer shall promptly notify the Dissemination Agent in writing. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to subsection (g).

(e) If the Dissemination Agent has been instructed by the Issuer to report the occurrence of a Listed Event, the Dissemination Agent shall file a notice of such occurrence with the MSRB (if the MSRB is not a Repository) and each Repository.

SECTION 6. Termination of Reporting Obligation. The obligations of the Issuer and the Dissemination Agent under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the 2023 Subordinated Bonds. If such termination occurs prior to the final maturity of the 2023 Subordinated Bonds, the Issuer shall give notice of such termination in the same manner as for a Listed Event under Section 5.

SECTION 7. Dissemination Agent; Filings.

(a) The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Issuer pursuant to this Disclosure Agreement. If at any time there is not any other designated Dissemination Agent, the Issuer shall be the Dissemination Agent. The initial Dissemination Agent shall be U.S. Bank Trust Company, National Association.

(b) Unless and until one or more different or additional Repositories are designated or authorized by the Securities and Exchange Commission, all filings with a Repository which are required by this Disclosure Agreement shall be filed with the MSRB through EMMA and shall be in an electronic format and accompanied by such identifying information as prescribed by the MSRB in accordance with the Rule.

SECTION 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Issuer and the Dissemination Agent may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, or 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the 2023 Subordinated Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the 2023 Subordinated Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (1) is approved by the Holders of 60% of the 2023 Subordinated Bonds, or (2) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the 2023 Subordinated Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Issuer shall describe such amendment in its next respective Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles from those described in Section 4(a)(1), on the presentation) of financial information or operating data being presented by the Issuer. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (1) notice of such change shall be given in the same manner as for a Listed Event under Section 5, and (2) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

SECTION 9. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 10. Default. In the event of a failure of the Issuer or the Trustee to comply with any provision of this Disclosure Agreement, the Trustee shall, at the request of any Participating Underwriter or the Holders of at least 25% aggregate principal amount of Outstanding Bonds and upon being indemnified to its satisfaction from and against any costs, liability, expenses and fees of the Trustee, including, without limitation, fees and expenses of its attorneys, or any Holder or Beneficial Owner of the 2023 Subordinated Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer or the Dissemination Agent, as the case may be, to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Subordinate Resolution, and the sole remedy under this Disclosure Agreement in the event of any failure of the Issuer or the Dissemination Agent to comply with this Disclosure Agreement shall be an action to compel performance.

SECTION 11. Duties, Immunities and Liabilities of Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement, and the Issuer agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys' fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's negligence or willful misconduct. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement and no implied duties for obligation shall be read into this Disclosure Agreement against the Dissemination Agent. The Dissemination Agent has no power to enforce nonperformance on the part of the Issuer. The Dissemination Agent shall be paid compensation by the Issuer for its services provided hereunder in accordance with its schedule of fees provided to the Issuer and all expenses, legal fees and costs of the Dissemination Agent made or incurred by the Dissemination Agent in the performance of its duties hereunder. The obligations of the Issuer under this Section shall survive resignation or removal of the Dissemination Agent and payment of the 2023 Subordinated Bonds.

SECTION 12. Notices. Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:

To the Issuer: Sacramento Municipal Utility District
6201 S Street, MS B405
Sacramento, California 95817
Attention: Treasurer
Telephone: (916) 732-6509
Fax: (916) 732-5835

To the Dissemination Agent: U.S. Bank Trust Company, National Association
Global Corporate Trust
One California Street, Suite 1000
San Francisco, California 94111
Telephone: (415) 677-3699
Fax: (415) 677-3769

To the Trustee: U.S. Bank Trust Company, National Association
Global Corporate Trust
One California Street, Suite 1000
San Francisco, California 94111
Telephone: (415) 677-3699
Fax: (415) 677-3769

The Issuer, the Dissemination Agent and the Trustee may, by giving written notice hereunder to the other person listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent. Unless specifically otherwise required by the context of this Disclosure Agreement, a party may give notice by any form of electronic transmission capable of producing a written record. Each such party shall file with the Trustee and Dissemination Agent information appropriate to receiving such form of electronic transmission.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Issuer, the Dissemination Agent, the Participating Underwriters and Holders and Beneficial Owners from time to time of the 2023 Subordinated Bonds, and shall create no rights in any other person or entity.

SECTION 14. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Dated: _____, 2023.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By _____
Treasurer

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
as Dissemination Agent

By _____
Authorized Officer

ACKNOWLEDGED:

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Trustee

By: _____
Authorized Officer

EXHIBIT A

NOTICE TO REPOSITORIES OF FAILURE TO FILE ANNUAL REPORT

Name of Issuer: Sacramento Municipal Utility District
Name of Bond Issue: Subordinated Electric Revenue Bonds, 2023 Series D and 2023 Series E
Subordinated Electric Revenue Refunding Bonds, 2023 Series F
Name of Borrower: Sacramento Municipal Utility District
Date of Issuance: _____, 2023

NOTICE IS HEREBY GIVEN that the Sacramento Municipal Utility District (the “Issuer”) has not provided an Annual Report with respect to the above-named Bonds as required by Section [] of Resolution No. 23-05-[], Section [] of Resolution No. 23-05-[] and Section [] of Resolution No. 23-05-[], each adopted May 19, 2023, by the Issuer. [The Issuer anticipates that the Annual Report will be filed by _____.]

Dated: _____

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION,
on behalf of Sacramento Municipal Utility District

cc: Sacramento Municipal Utility District

Attachment K to Resolution No. 23-05-11

CHAPMAN DRAFT OF MAY 10, 2023

STANDBY BOND PURCHASE AGREEMENT

dated as of [_____] 1, 2023,

between

SACRAMENTO MUNICIPAL UTILITY DISTRICT

and

TD BANK, N.A.

relating to:

\$_[_____]

SACRAMENTO MUNICIPAL UTILITY DISTRICT,
SUBORDINATED ELECTRIC REVENUE REFUNDING BONDS
2023 SERIES C

STANDBY BOND PURCHASE AGREEMENT

(This Table of Contents is not a part of this
Standby Bond Purchase Agreement and is only
for convenience of reference)

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STANDBY BOND PURCHASE AGREEMENT

This STANDBY BOND PURCHASE AGREEMENT dated as of [_____] 1, 2023 (together with all amendments, supplements and other modifications hereto, this “*Agreement*”), between SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district of the State of California (together with its successors and assigns, “*SMUD*”) and TD BANK, N.A., a national banking association (together with its successors and assigns, the “*Bank*”).

WITNESSETH:

WHEREAS, pursuant to the authority granted by the laws of the State of California, particularly Articles 6a and 6b of Chapter 6 of the Municipal Utility Act (California Public Utilities Code Section 12850 *et seq.*), Chapter 7.5 of the Municipal Utility District Act (California Public Utilities Code Section 13371 *et seq.*) and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (California Government Code Section 53.80 *et seq.*), and Resolution No. 23-05-[] Fourteenth Supplemental Resolution Authorizing the Issuance of Subordinated Electric Revenue Refunding Bonds, 2023 Series C (as amended, supplemented, modified or restated in accordance with the terms hereof and thereof, the “*Supplemental Resolution*”) adopted by the Board of Directors of SMUD, on May 18, 2023, SMUD authorized the issuance of its Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “*Bonds*”); and

WHEREAS, SMUD has determined to execute this Agreement in order to provide a source of funding for the purchase of Eligible Bonds (as hereinafter defined) which have not been remarketed by the Remarketing Agent (as hereinafter defined) upon optional or mandatory tender by the owners thereof;

WHEREAS, SMUD has determined to provide for the purchase by the Bank on the terms and conditions specified herein of Eligible Bonds (as hereinafter defined) but only to the extent that such Eligible Bonds have not been remarketed or the proceeds thereof are not available to pay the purchase price thereof as provided in the Supplemental Resolution; and

WHEREAS, the Bank is willing, upon the terms and conditions set forth in this Agreement, to purchase Eligible Bonds upon optional or mandatory tender by the holders hereof, other than those Eligible Bonds which have been remarketed and the proceeds of which are available to pay the purchase price thereof as provided in the Supplemental Resolution;

NOW, THEREFORE, to induce the Bank to purchase Eligible Bonds from time to time pursuant to the terms hereof, and for other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, SMUD and the Bank hereby agree as follows:

ARTICLE ONE

DEFINITIONS

Section 1.1. Definitions. As used in this Agreement:

“*Act*” means the Municipal Utility District Act, constituting Division 6 of the Public Utilities Code of the State of California, and all laws of the State of California amendatory thereof or supplemental thereto.

“*Affiliate*” means, as to any Person, any other Person directly or indirectly controlling, controlled by, or under direct or indirect common control with, such Person. A Person shall be deemed to be “controlled by” any other Person if such other Person possesses, directly or indirectly, power (a) to vote 10% or more of the securities (on a fully diluted basis) having ordinary voting power for the election of directors or managing general partners; or (b) to direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

“*Agreement*” has the meaning set forth in the introductory paragraph hereof.

“*Alternate Liquidity Facility*” means a replacement standby bond purchase agreement or other liquidity facility meeting the requirements of an “Alternate Liquidity Facility” set forth in the Supplemental Resolution.

“*Authorized SMUD Representative*” means the Chief Executive Officer and General Manager of SMUD, any Member of the Executive Committee of SMUD, the Chief Financial Officer of SMUD, the Treasurer of SMUD and/or the Secretary of SMUD.

“*Available Commitment*” as of any day, means the sum of the Available Principal Commitment and the Available Interest Commitment, in each case as of such day.

“*Available Interest Commitment*” initially means [_____] Dollars (\$[____]) (equal to thirty-four (34) days’ interest on the Bonds, computed as if the Bonds bore interest at the rate of twelve percent (12.00%) per annum and on the basis of a 365-day year), and thereafter shall mean such initial amount adjusted from time to time as follows:

(a) decreased by an amount that bears the same proportion to such amount as the amount of a reduction in the Available Principal Commitment pursuant to the definition of “Available Principal Commitment” bears to the Available Principal Commitment prior to such reduction; and

(b) increased by an amount that bears the same proportion to such amount as the amount of any increase in the Available Principal Commitment pursuant to clause (c) of the definition of “Available Principal Commitment” bears to the Available Principal Commitment prior to such increase; *provided* that, after giving effect to such adjustment, the Available Interest Commitment shall never exceed [_____] Dollars (\$[____]).

Any adjustment pursuant to clause (a) or (b) above shall occur simultaneously with the event requiring such adjustment.

“*Available Principal Commitment*” initially means [_____] Dollars (\$[_____]) and thereafter shall mean such initial amount adjusted from time to time as follows:

(a) decreased by the amount of any reduction in the Available Principal Commitment pursuant to Section 2.4 hereof;

(b) decreased by the principal amount of any Bonds purchased by the Bank pursuant to Section 2.1 hereof; and

(c) increased by the principal amount of any Bonds previously purchased by the Bank pursuant to Section 2.1 hereof, which a Bank Bondholder elects to retain pursuant to Section 2.5(c) hereof or that are sold or deemed sold by a Bank Bondholder pursuant to Section 2.5(b) hereof (and for which such Bank Bondholder has received immediately available funds equal to the principal amount thereof and accrued interest thereon at the Bank Rate).

Any adjustment pursuant to clause (a), (b) or (c) above shall occur simultaneously with the occurrence of the events described in such clauses.

“*Bank*” has the meaning set forth in the introductory paragraph hereof.

“*Bank Agreement*” means any credit agreement, loan agreement, letter of credit, reimbursement agreement, bond purchase agreement, liquidity agreement, direct purchase agreement (such as a continuing covenant agreement or supplemental bondholder’s agreement) or other agreement or instrument (or any amendment, supplement or modification thereto) entered into by SMUD with any Person, directly or indirectly, or otherwise consented to by SMUD, under which any Person or Persons undertakes to directly purchase, make loans, extend credit or liquidity to SMUD in connection with any of SMUD’s Debt payable from or secured by a lien on Net Revenues senior to or on a parity with the Bonds and Bank Bonds.

“*Bank Bond*” means each Bond purchased by the Bank under this Agreement, until such Bonds are remarketed in accordance with Section 2.5(b) hereof or cease to bear interest at the Bank Rate pursuant to Section 2.5(c) hereof and shall constitute “Liquidity Provider Bonds” under the Supplemental Resolution.

“*Bank Bondholder*” means the Bank (but only in its capacity as owner (which as used herein shall mean the beneficial owner if at the relevant time Bank Bonds are held in book-entry form) of Bank Bonds pursuant to this Agreement) and any other Person to whom a Bank Bondholder has sold Bank Bonds pursuant to Section 2.5(a) hereof.

“*Bank Bond Redemption Date*” has the meaning set forth in Section 2.11 hereof.

“*Bank Rate*” means the rate of interest per annum with respect to any Bank Bond (i) for any day commencing on the date such Bank Bond was purchased by the Bank and including the one hundred eightieth (180th) day next succeeding the date such Bank Bond was purchased by the Bank, equal to the Base Rate from time to time in effect, and (ii) for any day commencing on the one hundred eighty-first (181st) day next succeeding the date such Bank Bond was purchased by the Bank and at all times thereafter, equal to the sum of the Base Rate from time to time in effect *plus* one percent (1.0%); *provided, however*, that immediately and automatically upon the occurrence of an Event of Default (and without any notice given with respect thereto) and during the continuance of such Event of Default, “*Bank Rate*” shall mean the Default Rate.

“*Bank-Related Persons*” means the Bank, its Affiliates and the officers, directors, employees, agents and attorneys-in-fact of the Bank and Affiliates.

“*Base Rate*” means, for any day, a fluctuating rate of interest per annum equal to the greatest of (i) the Prime Rate in effect at such time *plus* one percent and a half (1.50%), (ii) the Federal Funds Rate in effect at such time *plus* two percent (2.00%) and (iii) seven percent (7.00%).

“*Bond Resolution*” means the Subordinated Bond Resolution as supplemented by the Supplemental Resolution.

“*Bonds*” has the meaning set forth in the recitals hereof.

“*Book Entry Bonds*” means the Bonds so long as the book entry system with DTC is used for determining beneficial ownership of the Bonds.

“*Business Day*” means a day which is not (a) a Saturday, Sunday or legal holiday on which banking institutions in Los Angeles, California or New York, New York are authorized by law to close, (b) a day on which the New York Stock Exchange or the Federal Reserve Bank is closed or (c) a day on which the principal offices of the Bank are closed.

“*Change in Law*” means the occurrence, after the Closing Date, of any of the following: (a) the adoption or taking effect of any Law, rule, regulation or treaty, including, without limitation Risk-Based Capital Guidelines, (b) any change in any Law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of any request, rule, ruling, guideline, regulation or directive (whether or not having the force of law) by any Governmental Authority; *provided* that notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, rulings, guidelines, regulations or directives thereunder or issued in connection therewith and (ii) all requests, rules, rulings, guidelines, regulations or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States of America or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a “Change in Law,” regardless of the date enacted, adopted or issued.

“*Closing Date*” means [____], 2023, subject to the satisfaction (or waiver by the Bank) of all of the conditions precedent set forth in Section 3.1 hereof.

“Code” means the Internal Revenue Code of 1986, as amended, and any successor statute thereto, and the regulations promulgated thereunder.

“Commitment Fee” has the meaning set forth in the Fee Agreement.

“Confidential Information” means any permitted redactable information regarding SMUD, the Bank or any Affiliate of the Bank including, without limitation, address and account information, e-mail addresses, telephone numbers, facsimile numbers, names and signatures of officers, employees and signatories.

“Conversion Date” has the meaning set forth in the Supplemental Resolution.

“Credit Default” means any condition or event which with the giving of notice or lapse of time or both would, unless cured or waived, become a Credit Event of Default.

“Credit Event of Default” means any of those Events of Default set forth in Section 6.1(a), 6.1(d), 6.1(e), 6.1(f), 6.1(g), 6.1(h), 6.1(i) or 6.2 hereof.

“Daily Rate” has the meaning set forth in the Supplemental Resolution.

“Debt” of any Person means at any date, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes, loan agreements, bank agreements or other similar instruments, (c) all obligations of such Person to pay the deferred purchase price of property or services (other than trade accounts payable arising in the ordinary course of business), (d) all obligations of such Person as lessee under leases (as determined under Governmental Accounting Standards Board Statement No. 87 Leases, or any successor guidance) shown on the liabilities side of the balance sheet of such Person, (e) all obligations secured by any Lien upon property of such Person, whether or not such Person has assumed or become liable for the payment of such obligations (other than collateralized commodity swaps the obligations under which are either (a) not secured by a Lien on Net Revenues or (b) secured by a Lien on Net Revenues subordinate to the Bonds and Bank Bonds), (f) all obligations of such Person on or with respect to letters of credit, banker’s acceptances and other evidences of indebtedness representing extensions of credit whether or not representing obligations for borrowed money, and (g) certificates of participation evidencing an undivided ownership interest in payments made by such Person (A) as lessee under any lease of property which in accordance with generally accepted accounting principles would be required to be capitalized on the balance sheet of such Person, (B) as purchaser under an installment sale agreement or (C) otherwise as an obligor in connection therewith, and (h) all Debt of any other Person of the kind referred to in clauses (a) through (g) above which is guaranteed (regardless of form) directly or indirectly in any manner by such Person.

“Default” means any condition or event which with the giving of notice or lapse of time or both would, unless cured or waived, become an Event of Default.

“Default Rate” means a per annum rate of interest equal to the sum of the Base Rate from time to time in effect plus two percent (2.00%).

“*Defaulted Interest*” means accrued interest on the Bonds which was not paid when due or any amounts accruing on amounts owed on the Bonds by reason of such amounts being not paid when due.

“*Designated Jurisdiction*” means any country or territory to the extent that such country or territory itself is the subject of any Sanction.

“*Dollars*” and the sign “\$” means lawful money of the United States of America.

“*DTC*” means The Depository Trust Company, and any successor or assign.

“*Electric System*” has the meaning set forth in the Bond Resolution.

“*Eligible Bonds*” means any Bonds Outstanding under and entitled to the benefits of the Bond Resolution which bear interest at the Daily Rate or the Weekly Rate and that are tendered or deemed tendered for purchase pursuant to Sections 84.01 or 84.02 of the Supplemental Resolution, other than any such Bonds which have been remarketed and the proceeds of which are available to pay the purchase price thereof as provided in the Bond Resolution and other than any Bond which is (a) a Bank Bond or (b) owned by or on behalf of, or is held by or for the account or for the benefit of, SMUD or any of its Affiliates.

“*ERISA*” means the Employee Retirement Income Security Act of 1974, as amended, or any successor statute thereto.

“*Event of Default*” has the meaning set forth in Article VI hereof.

“*Excess Interest*” has the meaning set forth in Section 2.19 hereof.

“*Excluded Taxes*” means, with respect to the Bank, any Participant or any Bank Bondholder, (a) taxes imposed on or measured by its overall net income (however denominated), and franchise taxes imposed on it (in lieu of net income taxes), by the jurisdiction (or any political subdivision thereof) under the laws of which the Bank, such Participant or such Bank Bondholder is organized or in which its principal office is located, and (b) any branch profits taxes imposed by the United States of America or any similar tax imposed by any other jurisdiction in which the Bank, such Participant or such Bank Bondholder is located.

“*Facility Maturity Date*” means [_____], 2027, or, if such day is not a Business Day, the next preceding Business Day.

“*Federal Funds Rate*” means, for any day, the rate per annum equal to the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve System arranged by Federal funds brokers on such day, as published by the Federal Reserve Bank of New York on the Business Day next succeeding such day; *provided* that: (a) if such day is not a Business Day, then the Federal Funds Rate for such day shall be such rate on such transactions on the next preceding Business Day as so published on the next succeeding Business Day; and (b) if no such rate is so published on such next succeeding Business Day, then the Federal Funds

Rate for such day shall be the average rate (rounded upward, if necessary, to a whole multiple of one-hundredth of one percent) charged to the Bank on such day on such transactions as determined by the Bank. Notwithstanding anything herein to the contrary, if the Federal Funds Rate as determined as provided above would be less than zero percent (0.0%), then the Federal Funds Rate shall be deemed to be zero percent (0.0%).

“*Fee Agreement*” means that certain Fee Agreement, dated the Closing Date, between SMUD and the Bank, as the same may be amended, modified or supplemented from time to time by written instrument executed by the Bank and SMUD, the terms of which are incorporated herein by reference.

“*Fiscal Year*” means the twelve-month period commencing on January 1 of each year and ending on December 31 of the same calendar year or such other twelve-month period as SMUD may from time to time determine as its Fiscal Year.

“*Fitch*” means Fitch Ratings, Inc. and its successors, and if such Person shall for any reason no longer perform the functions of a securities rating agency, “*Fitch*” shall be deemed to refer to any nationally recognized securities rating agency designated by SMUD that is acceptable to the Bank in its sole discretion.

“*Government Acts*” means any act or omission to act, whether rightful or wrongful, of any present or future de jure or de facto government or Governmental Authority.

“*Governmental Authority*” means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including, without limitation, the Financial Conduct Authority, the Prudential Regulation Authority and any supra-national bodies such as the European Union or the European Central Bank); *provided, however*, that, for the purposes of the definition of “*Change in Law*” herein only, “*Governmental Authority*” means the government of the United States of America or any other nation or any political subdivision thereof or any governmental or quasi-governmental entity, including any court, department, commission, board, bureau, agency, administration, central bank, service, district or other instrumentality of any governmental entity or other entity exercising executive, legislative, judicial, taxing, regulatory, fiscal, monetary or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or European Central Bank), or any arbitrator, mediator or other Person with authority to bind a party at law.

“*Immediate Termination Event*” means an Event of Default described in Section 6.2 hereof which is not a Suspension Event.

“*Indemnified Taxes*” means Taxes other than Excluded Taxes.

“*Interest Component*” has the meaning assigned to such term in Section 2.1 hereof.

“Interest Payment Date” has the meaning set forth in the Supplemental Resolution.

“Laws” means, collectively, all international, foreign, federal, state and local statutes, treaties, rules, guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

“Lien” means, with respect to any property, tangible or intangible, real or personal, any mortgage, lien, pledge, charge, security interest or other encumbrance of any kind in respect of such property.

“Liquidity Facility” has the meaning set forth in the Supplemental Resolution.

“Mandatory Tender” means the mandatory tender of the Bonds on any date on which the Bonds are subject to mandatory tender for purchase in accordance with Section 84.02 of the Supplemental Resolution.

“Master Bond Resolution” means Resolution No. 6649 of SMUD, adopted on January 7, 1971, and amended, supplemented, modified or restated from time to time in accordance with the terms hereof and thereof.

“Material Adverse Effect” or *“Material Adverse Change”* means (a) with respect to SMUD, a material adverse effect upon SMUD’s business, assets, liabilities, financial condition, results of operations or business prospects, and (b) with respect to SMUD’s obligations under this Agreement, the Fee Agreement or any other SMUD Program Document, a material adverse effect upon (i) the binding nature, validity or enforceability of SMUD’s obligations hereunder or thereunder, (ii) SMUD’s ability to perform its obligations hereunder or thereunder or (iii) the rights, security or interests of the Bank.

“Maximum Interest Rate” means (i) with respect to Bonds that are not Bank Bonds, the maximum interest rate on the Bonds as provided in the Supplemental Resolution, which initially shall be 12% per annum and (ii) with respect to Bank Bonds, means the Maximum Rate.

“Maximum Rate” means the maximum non-usurious lawful rate of interest permitted by applicable law.

“Modified Parity Debt” means Debt of SMUD described in clauses (b), (d), (f) and (h) of the definition of “Debt” herein (and in the case of clause (d) of the definition of “Debt” herein, excluding any lease, the obligation of which is subject to appropriation at the discretion of SMUD).

“Moody’s” means Moody’s Investors Service and its successors, and if such Person shall for any reason no longer perform the functions of a securities rating agency, “Moody’s” shall be

deemed to refer to any nationally recognized securities rating agency designated by SMUD that is acceptable to the Bank in its sole discretion.

“*Net Revenues*” has the meaning set forth in the Subordinated Bond Resolution.

“*Net Subordinated Revenues*” has the meaning set forth in the Subordinated Bond Resolution.

“*Notice of Bank Purchase*” means a notice in the form of Exhibit A attached hereto and incorporated herein by this reference.

“*Obligations*” means the Commitment Fees and all other obligations of SMUD to the Bank arising under or in relation to this Agreement, the Fee Agreement or any of the other Program Documents.

“*Official Statement*” means the Official Statement dated [____], 2023, relating to the Bonds.

“*Optional Tender*” means the optional tender of any of the Bonds in accordance with Section 84.01 of the Supplemental Resolution.

“*Outstanding*” has the meaning set forth in the Supplemental Resolution.

“*Parity Subordinated Debt*” has the meaning set forth in the Subordinated Bond Resolution.

“*Participant*” has the meaning set forth in Section 7.3(b) hereof.

“*Participation*” has the meaning set forth in Section 7.3(b) hereof.

“*Payment Account*” means TD Bank, N.A., ABA No. 031101266, Account Number: [____], Account Name: [____], Attention: [____], Reference: [____] – Loan# [____], or such other account as the Bank may designate from time to time.

“*Person*” means an individual, a corporation, a partnership, an association, a limited liability company, an association, a joint venture, a trust, an unincorporated organization or any other entity or organization, including a government or political subdivision or any agency or instrumentality thereof.

“*Plan*” means a pension plan providing benefits for employees of any Person.

“*Prime Rate*” means the variable interest rate as published by the Wall Street Journal in New York City (or a comparable substitute publication if the Wall Street Journal is not publishing such a rate) from time to time as the prime rate of interest. This rate of interest is used from time to time by the Bank as a means of pricing some loans to some of its customers and is not necessarily

tied to any external rate of interest or index nor does it necessarily reflect the lowest rate of interest actually charged by the Bank to any particular class or category of customer. Notwithstanding anything herein to the contrary, if the Prime Rate determined as provided above would be less than zero percent (0.0%), then the Prime Rate shall be deemed to be zero percent (0.0%).

“*Program Documents*” means this Agreement, the Bonds, the Fee Agreement, the Bond Resolution, the Remarketing Agreement and any documents related thereto.

“*Property*” means any interest in any kind of property or asset, whether real, personal or mixed, or tangible or intangible, whether now owned or hereafter acquired.

“*Purchase Date*” has the meaning assigned to such term in Section 2.3(a) hereof.

“*Purchase Notice*” has the meaning assigned to such term in Section 2.5(b) hereof.

“*Purchase Period*” means the period from the Closing Date to and including 5:00 p.m., New York time, on the earliest of (a) the Facility Maturity Date, (b) the date on which no Eligible Bonds are Outstanding, (c) the date on which SMUD voluntarily terminates this Agreement in accordance with this Agreement, and (d) the date on which the Available Commitment and the Bank’s obligation to purchase Eligible Bonds have been terminated in their entirety pursuant to Section 2.4 or Article Six hereof.

“*Purchase Price*” means, with respect to any Eligible Bond as of any date, 100% of the principal amount of such Eligible Bond plus (if the Purchase Date is not an Interest Payment Date) accrued and unpaid interest thereon to the Purchase Date, but in no event to exceed the Available Commitment; *provided, however*, if the Purchase Date for any Eligible Bond is also an Interest Payment Date for such Eligible Bond, the Purchase Price for such Eligible Bond shall not include accrued but unpaid interest on such Eligible Bond; and *provided, further, however*, that in no event shall the Purchase Price of any Bond include any premium owed with respect to any Bond or any Defaulted Interest.

“*Purchaser*” has the meaning assigned to such term in Section 2.5(b) hereof.

“*Rating Agency*” and “*Rating Agencies*” means, individually or collectively, as applicable, Moody’s, S&P and Fitch.

“*Recipient*” means the Bank and its parent or holding company, each Participant and its parent or holding company, each Bank Bondholder and its parent or holding company, and any other recipient of any payment to be made by or on account of any obligation of SMUD hereunder.

“*Remarketing Agent*” means Barclays Capital Inc., and its successors and assigns.

“*Remarketing Agreement*” means the Remarketing Agreement dated as of [____], 2023, between SMUD and the Remarketing Agent, as amended or supplemented in accordance with the terms hereof or thereof, or such other agreement as may be entered into with any remarketing agent with respect to the remarketing of the Bonds.

“*Request for Purchase*” has the meaning set forth in Section 2.3 hereof.

“*Revenues*” has the meaning set forth in the Subordinated Bond Resolution.

“*Risk-Based Capital Guidelines*” means (a) the risk-based capital guidelines in effect in the United States of America, including transition rules, and (b) the corresponding capital regulations promulgated by regulatory authorities outside the United States of America including transition rules, and any amendment to such regulations.

“*Sale Date*” has the meaning assigned to such term in Section 2.5(b) hereof.

“*Sale Price*” has the meaning assigned to such term in Section 2.5(b) hereof.

“*Sanction*” or “*Sanctions*” means any economic or financial sanction administered or enforced by the United States Government (including, without limitation, those administered by the U.S. Department of the Treasury’s Office of Foreign Assets Control (OFAC), the U.S. Department of State, the U.S. Department of Commerce, or through any existing or future United States Government statute or executive order.

“*S&P*” means S&P Global Ratings, and its successors, and if such division shall for any reason no longer perform the functions of a securities rating agency, “*S&P*” shall be deemed to refer to any other nationally recognized securities rating agency designated by SMUD that is acceptable to the Bank in its sole discretion.

“*Senior Bonds*” has the meaning given to the term “*Parity Bonds*” as defined in the Bond Resolution.

“*SMUD*” has the meaning set forth in the introductory paragraph hereof.

“*SMUD Board*” means the board of directors of SMUD.

“*SMUD Program Documents*” means the Program Documents to which SMUD is a party (including, without limitation, the Bond Resolution).

“*State*” means the State of California.

“*Subordinated Bond Resolution*” means Resolution No. 85-11-1 of SMUD, duly adopted at a meeting of SMUD on November 7, 1985, as amended and restated by Resolution No. 01-06-10 of SMUD, duly adopted at a meeting of SMUD on June 21, 2001, and amended and supplemented from time to time in accordance with the terms thereof.

“*Substitution Date*” has the meaning set forth in the Supplemental Resolution.

“*Supplemental Resolution*” has the meaning set forth in the recitals hereof.

“*Suspension Event*” has the meaning set forth in Section 6.3(b) hereof.

“*Swap Contract*” means any and all interest rate swap transactions or any other similar interest rate hedging transactions that hedge the interest rate on securities or other obligations issued by or on behalf of SMUD (including any options to enter into any of the foregoing), whether or not any such transaction is governed by or subject to any master agreement.

“*Taxes*” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, fines, additions to tax or penalties applicable thereto.

“*Termination Notice*” has the meaning set forth in Section 6.3(c) hereof.

“*Term-Out Commencement Date*” has the meaning set forth in Section 2.11 hereof.

“*Trustee*” means U.S. Bank Trust Company, National Association, and its permitted successors and assigns.

“*Weekly Rate*” has the meaning set forth in the Supplemental Resolution.

“*2022 Financial Statements*” means the audited financial statements of SMUD for the Fiscal Year ended December 31, 2022.

Section 1.2. Incorporation of Certain Definitions by Reference. Each capitalized term used herein and not otherwise defined herein shall have the meaning provided therefor in the Bond Resolution and, if not defined therein, in the Master Bond Resolution.

Section 1.3. Accounting Terms and Determinations. All accounting terms not specifically defined herein shall be construed in accordance with generally accepted accounting principles.

Section 1.4. Interpretation. The following rules shall apply to the construction of this Agreement and the Fee Agreement unless the context requires otherwise: (a) the singular includes the plural, and the plural the singular; (b) words importing any gender include the other gender and the neuter gender; (c) references to statutes are to be construed as including all statutory provisions consolidating, and all regulations promulgated pursuant to, such statutes; (d) references to “writing” include printing, photocopy, typing, lithography and other means of reproducing words in a tangible visible form; (e) the words “including,” “includes” and “include” shall be deemed to be followed by the words “without limitation”; (f) references to the introductory paragraph, recitals, articles, sections (or clauses or subdivisions of sections), exhibits, appendices, annexes or schedules are to those of this Agreement unless otherwise indicated; (g) references to agreements and other contractual instruments shall be deemed to include all subsequent amendments and other modifications to such instruments, but only to the extent that such amendments and other modifications are permitted or not prohibited by the terms of this Agreement; (h) article and section headings in this Agreement are included herein for convenience of reference only and shall not constitute a part of this Agreement for any other purpose; and (i) unless otherwise indicated, references to Persons include their respective permitted successors and assigns.

ARTICLE TWO

THE COMMITMENT; BANK BONDS

Section 2.1. Commitment to Purchase Bonds. Subject to the terms and conditions of this Agreement, including Section 3.2 hereof, the Bank hereby agrees from time to time during the Purchase Period to purchase, at the Purchase Price, with immediately available funds, Bonds which are Eligible Bonds which are tendered pursuant to (i) an Optional Tender or (ii) a Mandatory Tender and which, in either case, the Remarketing Agent has been unable to remarket. The Bank will pay said Purchase Price with its own funds. The aggregate principal amount (or portion thereof) of any Eligible Bond purchased on any Purchase Date shall be in an authorized denomination and, in any case, the aggregate principal amount of all Bonds purchased on any Purchase Date, together with the aggregate principal amount of all Bank Bonds then Outstanding, shall not exceed the Available Principal Commitment (calculated without giving effect to any purchase of Bonds by the Bank on such date) at 5:00 p.m., New York City time, on such date. The aggregate amount of the Purchase Price comprising interest on Bonds (the “*Interest Component*”) purchased on any Purchase Date shall not exceed the lesser of (a) the Available Interest Commitment on such date and (b) the actual aggregate amount of interest accrued on each such Bond to but excluding such Purchase Date.

Section 2.2. Bank Bonds. Any Bonds purchased by the Bank pursuant to Section 2.1 hereof shall thereupon constitute Bank Bonds and have all of the characteristics of Bank Bonds as set forth herein and in the Supplemental Resolution and shall be deemed and treated by SMUD and the Trustee like the Bonds that are not Bank Bonds, except for any different characteristics as set forth herein and in the Bond Resolution. Without limiting the foregoing, it is intended that the rating on all Bank Bonds shall be the same as the rating on Bonds which are not Bank Bonds. All Bank Bonds shall bear interest at the rate and be payable on the dates and in the amounts provided for in Section 2.10 or 2.11 hereof, respectively.

Section 2.3. Method of Purchasing. (a) The Trustee shall give notice by electronic mail promptly confirmed by a written notice in the form of Exhibit A to the Bank (each, a “*Request for Purchase*”), pursuant to an Optional Tender or a Mandatory Tender, no later than 12:15 p.m., New York City time, on the Business Day on which Bonds are subject to an Optional Tender or Mandatory Tender. If the Bank receives such notice as provided above, and subject, in each case, to the satisfaction of the conditions set forth in Section 3.2 hereof, the Bank will transfer to the Trustee not later than 2:45 p.m., New York City time, on such tender date (a “*Purchase Date*”), in immediately available funds, an amount equal to the aggregate Purchase Price of all or such portion of such Eligible Bonds as requested from the Trustee. Payment of the Purchase Price under this Agreement shall be made by the Bank by wire transfer of immediately available funds, to the Trustee at U.S. Bank Trust Company, National Association, ABA: [____], Account Number: [____], Account Name: [____]. Such account may be changed only by presentation to the Bank of a notice in form satisfactory to the Bank specifying a different account with the Trustee and executed by the Trustee and authenticated to the Bank’s satisfaction. A Notice of Bank Purchase shall be irrevocable after receipt thereof by the Bank. The Bank shall have no responsibility for, nor incur any liability in respect of, any act, or any failure to act, by the Trustee, including, without limitation, any failure of the Trustee to effect the purchase of Bonds

for the account of the Bank with such funds provided pursuant to this Section 2.3(a) or otherwise. The Bank hereby acknowledges that the Remarketing Agent has agreed in the Remarketing Agreement to use its best efforts to remarket Bonds purchased pursuant to this Section 2.3(a).

So long as Bonds purchased pursuant to this Section 2.3(a) are Book Entry Bonds held by the Trustee as custodian as part of DTC's FAST automated transfer program ("*FAST Eligible Bonds*"), concurrent with the Trustee's receipt of the Purchase Price for each purchase of Bonds by the Bank, the Trustee, as a participant of DTC (or any other successor securities depository) or an eligible transfer agent, shall, if so directed by the Bank, make a direct registration electronic book entry (A) crediting the DTC account designated by the Bank as its account in which to hold the Bonds purchased by the Bank (the "*Bank Book Entry Account*") with the principal amount of the Bonds purchased by the Bank using the Bank Bond CUSIP Number and (B) debiting the book entry account of DTC for the principal amount of such Bonds (the "*DTC Book Entry Account*") for the principal amount of the Bonds purchased by the Bank (thereby reducing the principal balance of the global certificate representing the Bonds). So long as the Bonds are FAST Eligible Bonds, upon a remarketing of Bank Bonds and the Trustee's receipt from the Remarketing Agent of the remarketing proceeds, the Trustee, as a participant of DTC (or any other successor securities depository) or an eligible transfer agent, shall, if the Trustee has previously credited the Bank Book Entry Account as described in clause (A) of the first sentence of this paragraph, make a direct registration electronic book entry in its records (X) debiting the Bank Book Entry Account of the Bank for the principal amount of the Bonds so remarketed and (Y) crediting the DTC Book Entry Account for the Bonds with the principal amount of the Bonds so remarketed (thereby increasing the principal balance of the global certificate representing the Bonds). The Trustee acknowledges that it is familiar with the procedures and requirements set forth in a notice from DTC, dated June 16, 2020, respecting "Variable Rate Demand Obligations ("*VRDO*") Failed Remarketings and Issuance of Bank Bonds" and agrees that, with respect to any and all Bonds, it will follow the procedures and requirements set forth in such notice, as the same may be amended from time to time. To the extent that, following any amendment of such notice, the procedures and requirements therein should become inconsistent with any aspect of the provisions of this paragraph, the Trustee, SMUD and the Bank shall promptly negotiate in good faith and agree upon amendments of this paragraph so as to eliminate such inconsistency.

If the Bonds are no longer FAST Eligible Bonds, concurrently with the Trustee's receipt of the Purchase Price for each purchase of Bonds by the Bank, the Trustee shall cause each Bank Bond to be registered in the name of the Bank and such Bank Bonds shall be held by the Trustee as the agent, bailee and trustee of the Bank for the exclusive benefit of the Bank. The Trustee acknowledges and agrees that it is acting and will act with respect to Bank Bonds at the direction of the Bank for the exclusive benefit of the Bank and is not and shall not at any time be subject in any manner or to any extent to the direction or control of SMUD or any other Person with respect to the Bank Bonds. The Trustee agrees to act in strict accordance with this Agreement and in accordance with any lawful written instructions delivered by the Bank to the Trustee from time to time pursuant hereto. Under no circumstances shall the Trustee deliver possession of the Bank Bonds to, or cause Bank Bonds to be registered in the name of, SMUD, the Remarketing Agent or any Person other than the Bank except in accordance with the express terms of this Agreement or otherwise upon the written instructions of the Bank. The Trustee agrees that if, while this Agreement is in effect, the Trustee shall become entitled to receive or shall receive any payment

in respect of any Bank Bonds held for the Bank, it shall accept the same as the Bank's agent and hold the same in trust on behalf of the Bank and deliver the same forthwith to the Bank. Upon the remarketing of any Bank Bonds and the Trustee's receipt from the Remarketing Agent of the amounts set forth in Section 2.5(b) hereof, the Trustee shall release Bank Bonds in a principal amount equal to the principal amount so remarketed to the Remarketing Agent for such Bonds in accordance with the terms of the Supplemental Resolution. The Trustee shall conclusively rely upon and shall be protected in acting upon any document believed by it to be genuine and to have been signed or presented by the proper party or parties. The Trustee shall not be liable for any error in judgment made in good faith by its responsible officers, employees and agents unless the Trustee or its responsible officers, employees or agents were negligent or engaged in willful misconduct. Anything herein to the contrary notwithstanding, the Trustee shall have no liability hereunder for any act or omission except such as results from its gross negligence or willful misconduct. The Trustee agrees that it will not, except as provided above, without the prior written consent of the Bank, sell, assign, transfer, exchange or otherwise dispose of, or grant any option with respect to, Bank Bonds, and will not create, incur or permit to exist any pledge, lien, mortgage, hypothecation, security interest, charge, option or any other encumbrance on or take any other action with respect to the Bank Bonds, or any interest therein, or any proceeds thereof. The Trustee shall deliver to the Bank at the Bank's request such information as may be in the possession of the Trustee with respect to Bank Bonds.

The Trustee shall be indemnified and held harmless by SMUD in connection with this Agreement, to the same extent provided in the Bond Resolution for matters arising thereunder.

The Interest Component of the Purchase Price paid for such Bonds shall be paid to the Bank as provided in Section 2.10 hereof.

(b) If the Bank receives a Notice of Bank Purchase after 12:15 p.m., New York City time, on a Purchase Date from the Trustee, the Bank, subject to satisfaction of the conditions provided in Section 3.2 hereof, will transfer to the Trustee at or before 2:45 p.m., New York City time, on the Business Day immediately following the Purchase Date specified in such notice, in immediately available funds, an amount equal to the aggregate Purchase Price of Eligible Bonds tendered or deemed tendered on such Purchase Date. In such event, all other provisions of Section 2.3(a) shall apply to the purchase and registration of Bank Bonds after the delivery of a Notice of Bank Purchase and transfer of funds as set forth herein.

(c) Upon request from time to time by SMUD, the Bank shall confirm to SMUD whether there are any Bank Bonds that are then Outstanding.

(d) Notwithstanding any provisions of this Section 2.3 to contrary, the Bank and DTC may cause the transfer of funds and the transfer of any Bank Bond as described in this Section 2.3 on the basis of delivery versus payment or by such other means as shall be acceptable to the Bank, the Trustee and DTC and not contrary to the Bond Resolution.

(e) Following any sale of Bank Bonds pursuant to Section 2.5(b) hereof or otherwise, or any election to retain Bonds pursuant to Section 2.5(c) hereof, the Bank or other Bank Bondholder

shall retain the right to receive payment from SMUD of any interest thereon as provided herein and in the Bond Resolution.

(f) Any sale of a Bank Bond pursuant to this Section 2.3 shall be without recourse to the seller and without representation or warranty of any kind by the Bank or any Bank Bondholder.

Section 2.4. Mandatory Reductions of Available Commitment; Termination; Substitution.

(a) Upon (i) any redemption, repayment or other payment of all or any portion of the principal amount of the Bonds so that such Bonds shall cease to be Outstanding, the aggregate Available Principal Commitment shall, subject to Section 2.4(d) below, be reduced by the principal amount of such Bonds so redeemed, repaid or otherwise deemed paid, as the case may be, or (ii) the earlier to occur of (A) close of business on the Business Day immediately following the Conversion Date (other than a Conversion Date in respect of a change from the Daily Rate to the Weekly Rate or the Weekly Rate to the Daily Rate) and (B) the date on which the Bank honors any properly made request to purchase Eligible Bonds tendered for purchase as a result from such conversion, the aggregate Available Principal Commitment shall, subject to Section 2.4(c) below, be reduced to zero and, in the case of either (i) or (ii), the Available Interest Commitment shall also be simultaneously reduced as provided in the definition thereof in Article One hereof; *provided, however,* that in the event any action described in clause (i) or (ii) above results in a reduction of the Available Commitment to zero, all Obligations, including, without limitation, all principal and interest evidenced by Bank Bonds and all amounts payable under Article Two hereof, shall be paid to the Bank up to and including the time of said reduction as described in the notice set forth in Section 2.4(d) below.

(b) The Available Commitment shall, subject to Section 2.4(d) below, terminate at the earlier to occur of (i) the close of business no sooner than the Business Day immediately following the Substitution Date and (ii) the date on which the Bank honors any properly made request to purchase Eligible Bonds tendered for purchase as a result from such substitution. SMUD shall comply with the requirements of the Supplemental Resolution with respect to the delivery of an Alternate Liquidity Facility.

(c) On any day that no Bank Bonds are Outstanding, SMUD may terminate this Agreement at any time following no less than fifteen (15) days' prior written notice to the Bank, the Trustee and the Remarketing Agent; *provided* that SMUD shall comply with the requirements of the Bond Resolution with respect to terminating or replacing this Agreement. This Agreement shall terminate on the date set forth in such notice, unless prior to such date, there shall be Outstanding Bank Bonds.

(d) In connection with any reduction or termination of the Available Commitment as described in Sections 2.4(a), (b) and (c) above, the Trustee shall provide the Bank with written notice of the effective date of such reduction or termination and, unless and until said notice is received by the Bank, the Available Commitment shall not be deemed reduced and/or terminated pursuant to the terms of Sections 2.4(a), (b) and (c).

(e) Except as specifically provided in this Section 2.4, SMUD shall have no right to reduce or terminate the Available Commitment.

Section 2.5. Sale of Bank Bonds.

(a) *Right to Sell Bank Bonds.* The Bank expressly reserves the right to sell, at any time, without the consent of SMUD, Bank Bonds subject, however, to the express terms of this Agreement. The Bank agrees that such sales (other than sales made pursuant to Section 2.5(c) hereof) will be made only to institutional investors or other entities or individuals which customarily purchase tax-exempt or taxable securities in large denominations. The Bank agrees to notify SMUD, the Trustee and the Remarketing Agent promptly in writing of any such sale (other than a sale made pursuant to Section 2.5(c) hereof) and, if such Bank Bond is a Book Entry Bond, specifying in accordance with DTC guidelines the account at DTC to which such Bank Bond is credited; and to notify the transferee in writing that such Bond is no longer an Eligible Bond so long as it remains a Bank Bond and that there may not be a short-term investment rating assigned to such Bond so long as it remains a Bank Bond. Any Bank Bondholder purchasing a Bank Bond from the Bank shall be deemed to have agreed (i) not to sell such Bank Bond to any Person except the Bank, an institutional investor or other entity or individual which customarily purchases tax-exempt or taxable securities in large denominations or a Purchaser identified by the Remarketing Agent pursuant to Section 2.5(b) hereof and (ii) if such Bank Bond is a Book Entry Bond, to give all notices in the manner and by the time required by DTC to exclude such Bank Bond from Mandatory Tenders of Bonds while it remains a Bank Bond.

(b) *Purchase Notices.* Prior to 12:30 p.m., New York City time, on any Business Day on which a Bank Bondholder holds Bank Bonds, the Remarketing Agent may deliver a notice (a “*Purchase Notice*”) to a Bank Bondholder as registered on the bond register and to the Bank, stating that it has located a purchaser (the “*Purchaser*”) for some or all of such Bank Bonds and that such Purchaser desires to purchase on the Business Day following the Business Day on which a Bank Bondholder receives, prior to 12:30 p.m., New York City time, a Purchase Notice (a “*Sale Date*”) an authorized denomination of such Bonds at a price equal to the principal amount thereof, plus accrued interest thereon (calculated as if such Bonds were not Bank Bonds) (the “*Sale Price*”); *provided, however*, that the Remarketing Agent shall not remarket Bank Bonds following the delivery of a Termination Notice pursuant to Section 6.3(c) hereof or SMUD’s termination pursuant to Section 2.4(c) hereof.

(c) *Sale of Bank Bonds.* A Bank Bondholder shall decide whether to sell any Bank Bonds to any Purchaser and shall give written notice of such decision to SMUD, the Trustee and the Remarketing Agent by 3:00 p.m., New York City time, on the Business Day preceding the Sale Date. In the event such notice is not timely delivered by a Bank Bondholder, such Bank Bondholder shall be deemed to have determined to sell such Bank Bonds to a Purchaser on the Sale Date (subject to receipt by it of the funds called for by the next following sentence). If a Bank Bondholder determines or is deemed to have determined to sell such Bank Bonds to a Purchaser, such Bank Bondholder shall deliver such Bank Bonds to the Trustee (or, in the case of Bank Bonds which are Book Entry Bonds, shall cause the beneficial ownership thereof to be credited to the account of the Remarketing Agent at DTC) by 10:00 a.m., New York City time, on the Sale Date against receipt of the Sale Price therefor in immediately available funds or at the Bank Bondholder’s address listed in the bond register, and such Bonds shall thereupon no longer be considered Bank Bonds; *provided that*, in the event that the Bank Bondholder has not delivered Bank Bonds as provided above and the Sale Price therefor has been delivered as provided above,

such Bank Bonds shall be deemed to have been delivered and such Bonds shall no longer be considered Bank Bonds. When Bank Bonds are purchased in accordance with this Section 2.5(c), the Trustee shall, upon receipt of such Bank Bonds and upon receipt by such Bank Bondholder of the Sale Price, notify SMUD and the Remarketing Agent that such Bonds are no longer Bank Bonds. Any interest accrued on the Bank Bonds shall be paid to the Bank Bondholder as provided in Section 2.10 hereof. Any sale of a Bank Bond pursuant to this Section 2.5 shall be without recourse to the seller and without representation or warranty of any kind. If a Bank Bondholder notifies SMUD, the Trustee and the Remarketing Agent, as provided in the first sentence of this Section 2.5(c), that it will not sell its Bank Bonds, the Trustee shall notify SMUD, the Remarketing Agent, the Bank and such Bank Bondholder that, as of the Sale Date, such Bond or Bonds shall no longer constitute Bank Bonds and such Bonds shall be deemed to have been remarketed and the Available Commitment shall be appropriately increased.

(d) *Delivery Versus Payment.* Notwithstanding any provisions of this Section 2.5 to contrary, the Bank and DTC may cause the transfer of any Bank Bond and the transfer of any funds described in this Section 2.5 on the basis of delivery versus payment or by such other means as shall be acceptable to the Bank, the Trustee and DTC and not contrary to the Bond Resolution.

Section 2.6. Rights of Bank Bondholders. Upon purchasing Bank Bonds, Bank Bondholders shall be entitled to and, where necessary, shall be deemed assigned all rights and privileges accorded Bond owners under the Bond Resolution. Upon purchasing Bank Bonds, Bank Bondholders shall be recognized by SMUD and the Trustee as the true and lawful owners (or, in the case of Book Entry Bonds, beneficial owners) of the Bank Bonds, free from any claims, liens, security interests, equitable interests and other interests of SMUD, except as such interests might exist under the terms of the Bank Bonds with respect to all Bond owners (or, in the case of Book Entry Bonds, beneficial owners) of the Bonds.

Section 2.7. Commitment Fees and Other Fees; Default Rate. (a) SMUD hereby agrees to pay and perform its obligations provided for in the Fee Agreement, including the payment by SMUD to the Bank of the nonrefundable Commitment Fees and the other fees, expenses and payments described in the Fee Agreement at the times, on the dates and in the amounts specified in the Fee Agreement, the terms of such Fee Agreement being incorporated herein by reference as if fully set forth herein. Any references herein or in any other document to the Commitment Fee and such other fees, expenses and payments owed to the Bank hereunder without specific reference to the Fee Agreement shall be read so as to include the Fee Agreement, and any reference to this Agreement shall be deemed to include a reference to the Fee Agreement. The Fee Agreement and this Agreement shall be construed as one agreement between SMUD and the Bank and all obligations under the Fee Agreement shall be construed as obligations hereunder.

(b) SMUD shall pay within thirty (30) days after demand any amounts advanced by or on behalf of the Bank to the extent required to cure any Default, Event of Default or event of nonperformance hereunder or any Program Document, together with interest at the Default Rate.

(c) SMUD agrees to pay the Bank, upon demand, interest on any and all amounts owed by SMUD under this Agreement from the earlier of the date such amounts are due and payable but not paid and the occurrence and during the continuation of an Event of Default until payment

thereof in full, at a fluctuating interest rate per annum (computed on the basis of a year of 365 or 366 days, as applicable, and the actual number of days elapsed) equal to the Default Rate and shall be payable by SMUD on demand.

Section 2.8. Computations: Payments. Interest payable to the Bank on Bank Bonds shall be computed as set forth, and paid for (subject to the following sentence) as provided, in Section 2.10 hereof. If the Bank Bonds are not Book Entry Bonds, then (i) all payments to the Bank hereunder shall be made in U.S. Dollars and in immediately available funds and (ii) unless the Bank shall otherwise direct, all such payments shall be made by means of wire transfer of funds through the Federal Reserve Wire System to the Bank's account to the following account: TD Bank, N.A.; ABA #: 031101266; Beneficiary's Name: [____]; Beneficiary's Address: [____]; Beneficiary's Account Number: [____]; For Further Credit: [____]; Ref: [____] (or to such other account as the Bank may specify in writing from time to time).

Section 2.9. Security. (a) This Agreement constitutes the Liquidity Facility under the Supplemental Resolution and has all rights and benefits thereof. In order to secure the timely payment of the Bonds, the Bank Bonds and all other Parity Subordinated Debt, SMUD has pledged the Net Subordinated Revenues, pursuant to and on the terms and subject to the conditions set forth in the Bond Resolution. The pledge of Net Subordinated Revenues under the Bond Resolution constitutes a valid pledge of and charge and lien upon the Net Subordinated Revenues, has attached and is effective, binding, and enforceable against SMUD, its successors, purchasers of any of the Net Subordinated Revenues, creditors, and all others asserting rights therein to the extent set forth in, and in accordance with, the Bond Resolution, irrespective of whether those parties have notice of the lien on, security interest in and pledge of the Net Subordinated Revenues and without the need for any physical delivery, recordation, filing or further act. The pledge of the Net Subordinated Revenues securing the Bonds, the Bank Bonds and all other the Parity Subordinated Debt is only subordinate to the pledge of the Net Revenues securing the Senior Bonds.

(b) SMUD hereby grants a fourth lien and charge on and pledge of the Net Revenues to secure the timely payment of all Obligations hereunder and under the Fee Agreement (other than the Bank Bonds). The lien on, pledge of and charge on Net Revenues all Obligations hereunder and under the Fee Agreement (other than the Bank Bonds) constitutes a valid pledge of and charge and lien upon the Net Revenues on a fourth lien basis and, has attached and is effective, binding, and enforceable against SMUD, its successors and purchasers of any of the Debt secured by Net Revenues, creditors, and all others asserting rights therein, irrespective of whether those parties have notice of the lien on, security interest in and pledge of the Net Revenues and without the need for any physical delivery, recordation, filing or further act.

Section 2.10. Payments. Notwithstanding anything to the contrary contained in any Bank Bond, SMUD agrees that (a) the Interest Component shall be due and payable on, the earliest of (i) the Interest Payment Date next succeeding the Purchase Date, (ii) the Sale Date or the date such Bank Bond is paid at maturity or redeemed and (iii) the last day of the Purchase Period and (b)(i) interest on the unpaid principal amount of each Bank Bond from and including the applicable Purchase Date and the Interest Component shall be computed at a rate per annum (computed on the basis of a year of 365 or 366 days, as applicable, and the actual number of days elapsed) equal

to the Bank Rate, subject to the provisions of Section 2.19 hereof, and (ii) interest payable pursuant to clause (b)(i) above shall be payable (A) on the first Business Day of each calendar month, (B) upon redemption or purchase in lieu of redemption of such Bank Bond pursuant to the Bond Resolution (to the extent of the interest accrued on the amount being redeemed), (C) on each Sale Date (to the extent of the interest accrued on the amount being sold or deemed sold after a credit for any interest included in the Sale Price and as provided in Section 2.5(c) hereof), (D) on the date the Purchase Period is terminated pursuant to the terms hereof and (E) at maturity (whether by acceleration or otherwise). In the event any Bank Bond is remarketed or otherwise transferred by the Bank before payment in full of the funds advanced by the Bank hereunder with respect thereto, together with (without duplication of the Interest Component of the amount so advanced) interest on the principal amount of such Bank Bond at the Bank Rate, the provisions of this Article Two shall continue to apply to such indebtedness until all sums owing for all periods during which the same was a Bank Bond are paid. All or any portion of the Bank Bonds may be optionally redeemed at any time without penalty. The obligation of SMUD to make the payments described in this Section 2.10 shall be reduced to the extent that such obligations are paid pursuant to the Supplemental Resolution or as part of the Sale Price.

Section 2.11. Mandatory Redemption. Bank Bonds purchased on a Purchase Date shall be subject to mandatory redemption prior to 4:00 p.m., New York City time, on the related Purchase Date; *provided, however*, that subject to the satisfaction of the conditions precedent set forth in Section 3.3 hereof on the applicable Purchase Date, Bank Bonds purchased on such Purchase Date shall not be subject to mandatory redemption on such Purchase Date and, instead, shall be subject to mandatory redemption in accordance with the immediately succeeding sentence. If the conditions precedent set forth in Section 3.3 hereof are satisfied on the applicable Purchase Date, such Bank Bonds shall be subject to mandatory redemption in equal semi-annual principal installments, the first such installment being payable on the date which is the 180th day immediately following the related Purchase Date (the “*Term-Out Commencement Date*”), and on each six month anniversary thereafter so that such Bank Bonds are paid in full no later than the fifth anniversary of the Purchase Date (if such fifth anniversary of the Purchase Date is not a Business Day, the Business Day next preceding such day) (the date of each such redemption being a “*Bank Bond Redemption Date*”). If the conditions precedent set forth in Section 3.3 hereof are not satisfied on the related Purchase Date, such Bank Bonds shall be subject to mandatory redemption in full on such Purchase Date (at a redemption price equal to the principal amount thereof, plus accrued interest thereon, without premium). Interest on such Bank Bonds shall be payable as provided in Section 2.10 hereof. Notwithstanding the foregoing, SMUD may optionally redeem any Bank Bond without penalty at a redemption price equal to the principal amount thereof, plus accrued interest thereon, without premium. All obligations with respect to all Bank Bonds (including the payment of the Interest Component) shall be due and payable in full on the earliest of (a) the date such Bank Bonds are remarketed and sold or deemed sold by the Bank or a Bank Bondholder to a Purchaser pursuant to Section 2.5(c) hereof, (b) the date the interest rate borne by the Bonds is converted to a rate other than a Covered Rate, (c) the date of the delivery of an Alternate Liquidity Facility and (d) any date determined pursuant to Section 6.3 hereof.

Section 2.12. Extension of Purchase Period. (i) No later than 90 days prior to the Facility Maturity Date, SMUD may request the Bank to extend the then current Facility Maturity Date for

a period as agreed to by SMUD and the Bank by delivering notice to the Bank in the form of Exhibit C attached hereto. If the Bank, in its sole discretion, elects to extend the Facility Maturity Date then in effect, it shall deliver to SMUD within 60 days of receiving a request, a written notice of extension in the form of Exhibit D attached hereto (herein referred to as a “*Notice of Extension*”) designating the date to which the Facility Maturity Date is being extended. Such extension of the Facility Maturity Date shall be effective, after receipt of such Notice of Extension, on the Business Day following the date of delivery of such Notice of Extension, and thereafter all references in this Agreement to the Facility Maturity Date shall be deemed to be references to the date designated as such in the most recent Notice of Extension delivered to SMUD. Any date to which the Facility Maturity Date has been extended in accordance with this Section 2.12 may be extended in like manner. If the Bank fails to provide SMUD with a Notice of Extension as provided hereinabove, the Bank shall be deemed not to have consented to SMUD’s request. The Bank shall use commercially reasonable efforts to promptly notify SMUD if it will not extend the Facility Maturity Date, but the Bank’s failure to do so shall be deemed a denial of the extension request.

(ii) Notwithstanding the foregoing, it is understood and agreed that the foregoing provisions are intended for the convenience of the parties only and shall in no respect prohibit the parties from agreeing to extend the Purchase Period under other circumstances or at other times. In the event the Purchase Period is extended under any other circumstances, the Bank shall give prompt written notice thereof to SMUD.

(iii) If the Purchase Period is extended, whether pursuant to subsection (i) above or otherwise, such extension shall be conditioned upon the prompt preparation, execution and delivery of documentation, satisfactory to SMUD and the Bank and their respective counsel.

Section 2.13. General Provisions as to Payments. All payments to be made by SMUD under this Agreement and the Fee Agreement shall be made at the Payment Account not later than 4:00 P.M. (New York time) on the date when due and shall be made in lawful money of the United States of America in freely transferable and immediately available funds. All payments received by the Bank after 4:00 P.M. (New York time) shall be deemed to have been made on the next succeeding Business Day and any applicable interest or fees shall continue to accrue.

Section 2.14. Computation of Interest and Fees. All fees payable hereunder and under the Fee Agreement shall be calculated on the basis of a 360-day year based upon the actual number of days elapsed and interest with respect to Bank Bonds and all other Obligations shall be calculated on the basis of a 365 or 366 day year, as applicable, and the actual number of days elapsed.

Section 2.15. Payment Due on Non-Business Day to Be Made on Next Business Day. If any sum becomes payable pursuant to this Agreement or the Fee Agreement on a day which is not a Business Day, the date for payment thereof shall be extended, without penalty, to the next succeeding Business Day, and such extended time shall be included in the computation of interest and fees.

Section 2.16. Net of Taxes, Etc. (a) Any and all payments to the Bank or any Bank Bondholder by SMUD hereunder or with respect to the Bank Bonds shall be made free and clear of and without deduction or withholding for any and all Indemnified Taxes. If SMUD shall be

required by law to deduct or withhold any Indemnified Taxes imposed by the United States of America or any political subdivision thereof from or in respect of any sum payable hereunder or with respect to the Bank Bonds, then (i) the sum payable shall be increased as may be necessary so that after making all required deductions (including deductions applicable to additional sums payable under this Section) the Bank or such Bank Bondholder receives an amount equal to the sum it would have received had no such deductions been made, (ii) SMUD shall make such deductions and (iii) SMUD shall timely pay the full amount deducted to the relevant taxation authority or other authority in accordance with applicable law. If SMUD shall make any payment under this Section to or for the benefit of the Bank or such Bank Bondholder with respect to Indemnified Taxes and if the Bank or such Bank Bondholder shall claim any credit or deduction for such Indemnified Taxes against any other taxes payable by the Bank or such Bank Bondholder to any taxing jurisdiction then the Bank or such Bank Bondholder shall pay to SMUD an amount equal to the amount by which such other taxes are actually reduced; *provided*, that the aggregate amount payable by the Bank or such Bank Bondholder pursuant to this sentence shall not exceed the aggregate amount previously paid by SMUD with respect to such Indemnified Taxes. In addition, SMUD agrees to pay any present or future stamp, recording or documentary taxes and any other excise or property taxes, charges or similar levies that arise under the laws of the United States of America or any state of the United States or any other nation from any payment made hereunder or under the Bank Bonds or from the execution or delivery of this Agreement, or otherwise with respect to this Agreement the Bank Bonds (hereinafter referred to as “*Other Taxes*”). The Bank or such Bank Bondholder shall provide to SMUD within a reasonable time a copy of any written notification it receives with respect to Indemnified Taxes or Other Taxes owing by SMUD to the Bank or such Bank Bondholder hereunder; *provided*, that the Bank or such Bank Bondholder’s failure to send such notice shall not relieve SMUD of its obligation to pay such amounts hereunder. SMUD may conduct a reasonable contest of any such Indemnified Taxes with the prior written consent of the Bank, which consent shall not be unreasonably withheld or delayed; *provided*, that SMUD shall, on demand, immediately reimburse the Bank for any and all expenses (including attorneys’ fees for services that may be required or desirable, as determined by the Bank in its sole discretion) that may be incurred by the Bank in connection with any such contest.

(b) SMUD shall, to the fullest extent permitted by law and subject to the provisions hereof, pay the Bank or such Bank Bondholder for the full amount of Indemnified Taxes and Other Taxes including any Indemnified Taxes or Other Taxes imposed by any jurisdiction on amounts payable under this Section paid by the Bank or such Bank Bondholder or any liability (including penalties, interest and expenses) arising therefrom or with respect thereto whether or not such Indemnified Taxes or Other Taxes were correctly or legally asserted; *provided*, that SMUD; shall not be obligated to pay the Bank or such Bank Bondholder for any penalties, interest or expenses relating to Indemnified Taxes or Other Taxes arising from the Bank or such Bank Bondholder’s gross negligence or willful misconduct. The Bank or such Bank Bondholder agrees to give notice to SMUD of the assertion of any claim against the Bank or such Bank Bondholder relating to such Indemnified Taxes or Other Taxes as promptly as is practicable after being notified of such assertion; *provided*, that the Bank or such Bank Bondholder’s failure to notify SMUD promptly of such assertion shall not relieve SMUD of its obligation under this Section. Payments by SMUD pursuant to this Section shall be made within thirty (30) days from the date the Bank or such Bank Bondholder makes written demand therefor, which demand shall be accompanied by a certificate describing in reasonable detail the basis thereof. The Bank or such Bank Bondholder agrees to

repay to SMUD any refund (including that portion of any interest that was included as part of such refund) with respect to Indemnified Taxes or Other Taxes paid by SMUD pursuant to this Section received by the Bank or such Bank Bondholder for Indemnified Taxes or Other Taxes that were paid by SMUD pursuant to this Section and to contest, with the cooperation and at the expense of SMUD, any such Indemnified Taxes or Other Taxes which the Bank or such Bank Bondholder or SMUD reasonably believes not to have been properly assessed.

(c) Within thirty (30) days after the date of any payment of Indemnified Taxes by SMUD, SMUD shall furnish to the Bank the original or a certified copy of a receipt evidencing payment thereof.

(d) Notwithstanding anything contained in paragraphs (a) or (b) of this Section, SMUD shall have no liability to the Bank or any Bank Bondholder with respect to any Indemnified Taxes to the extent incurred or imposed on the Bank or any Bank Bondholder more than one hundred eighty (180) days prior to the date written notification thereof is given to SMUD by the Bank (the “*Cut-Off Date*”), except where (A) the Bank had no actual knowledge of the action resulting in such Indemnified Taxes as of the Cut-Off Date or (B) such Indemnified Taxes apply to the Bank retroactively to a date prior to the Cut-Off Date.

(d) The obligations of SMUD under this Section 2.16 shall survive the termination of this Agreement and the repayment of all Obligations hereunder for a period of one hundred eighty (180) days after such termination and final repayment; *provided, however*, that in the event any taxing jurisdiction imposes Indemnified Taxes on the Bank or any Bank Bondholder after the end of such 180 day period but retroactively to a date prior to the end of such 180 day period, as described in this Section 2.16, the Bank may impose such Indemnified Taxes on SMUD in accordance with the terms of this Section 2.16; *provided, further, however*, that the foregoing proviso shall only apply to any Indemnified Taxes imposed not later than two (2) years after the date this Agreement terminates and all Obligations have been paid in full.

Section 2.17. Increased Costs. (a) *Increased Costs Generally.* If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, liquidity ratio, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or advances, loans or other credit extended or participated in by, the Bank or any Recipient;

(ii) subject any Recipient to any Taxes of any kind whatsoever with respect to this Agreement, or change the basis of taxation of payments to the Bank or such Recipient in respect thereof (except for Indemnified Taxes covered by Section 2.16 hereof and the imposition of, or any change in the rate of any Excluded Tax payable by the Bank or any Recipient); or

(iii) impose on the Bank or any Recipient any other condition, cost or expense affecting this Agreement or the Fee Agreement or any participation therein;

and the result of any of the foregoing shall be to increase the cost to the Bank or such Recipient related to issuing or maintaining this Agreement, the Available Commitment or any Bank Bond, or to reduce the amount of any sum received or receivable by the Bank or such Recipient hereunder (whether of principal, interest or any other amount) then, upon written request of the Bank, SMUD shall promptly pay to the Bank (for the Bank or such Recipient, as the case may be) such additional amount or amounts as will compensate the Bank or such Recipient, as the case may be, for such additional costs incurred or reduction suffered.

(b) *Capital Requirements.* If the Bank or any Recipient determines that any Change in Law affecting the Bank or such Recipient or the Bank's or such Recipient's parent or holding company, if any, regarding capital or liquidity requirements, has or would have the effect of reducing the rate of return on the Bank's or such Recipient's capital or liquidity or the capital or liquidity of such Bank's or such Recipient's parent or holding company holding, if any, as a consequence of this Agreement, or for maintaining this Agreement, the Available Commitment or any Bank Bond, to a level below that which the Bank or such Recipient or the Bank's or such Recipient's parent or holding company could have achieved but for such Change in Law (taking into consideration the Bank's or such Recipient's policies and the policies of the Bank's or such Recipient's parent or holding company with respect to capital or liquidity adequacy), then from time to time, upon written request of the Bank, SMUD shall promptly pay to the Bank (for the Bank or such Recipient, as the case may be) such additional amount or amounts as will compensate the Bank or such Recipient or the Bank's or such Recipient's parent or holding company for any such reduction suffered.

(c) *Certificates for Reimbursement.* A certificate of the Bank or a Recipient setting forth the amount or amounts necessary to compensate the Bank or any such Recipient or the Bank's or any such Recipient's parent or holding company, as the case may be, as specified in paragraph (a) or (b) of this Section and delivered to SMUD, shall be conclusive absent manifest error. SMUD shall pay the Bank or any such Recipient, as the case may be, the amount shown as due on any such certificate within thirty (30) days after receipt thereof. Each Recipient shall have the benefits of this Section 2.17, but shall not be entitled to receive any greater payment under such Section than the Bank would have been entitled to receive in connection with the rights transferred.

(d) *Delay in Requests.* Failure or delay on the part of the Bank or any such Recipient to demand compensation pursuant to the foregoing provisions of this Section shall not constitute a waiver of the Bank's or such Recipient's right to demand such compensation; *provided* that SMUD shall not be required to compensate the Bank or such Recipient pursuant to the foregoing provisions of this Section for any increased costs incurred or reductions suffered more than six (6) months prior to the date that the Bank notifies SMUD of the Change in Law giving rise to such increased costs or reductions and of the Bank's or such Recipient's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the six (6) month period referred to above shall be extended to include the period of retroactive effect thereof).

(e) *Survival.* The obligations of SMUD under this Section 2.17 shall survive the termination of this Agreement and the repayment of all Obligations hereunder for a period of one hundred eighty (180) days after such termination and final repayment; *provided, however,* that in

the event any Change in Law provides for retroactive increased costs or retroactive imposition of capital adequacy or liquidity requirements, as described in this Section 2.17, the Bank or a Recipient may impose such costs on SMUD in accordance with the terms of this Section 2.17; *provided, further, however*, that the foregoing proviso shall only apply to any Change in Law occurring not later than two (2) years after the date this Agreement terminates and all Obligations have been paid in full.

Section 2.18. Margin Regulations. No portion of the proceeds of any advances by the Bank hereunder shall be used by SMUD (or the Trustee or any other Person on behalf of SMUD) for the purpose of “purchasing” or “carrying” any margin stock or used in any manner which might cause the borrowing or the application of such proceeds to violate Regulation U, Regulation T, or Regulation X of the Board of Governors of the Federal Reserve System or any other regulation of said Board of Governors or to violate the Securities Exchange Act of 1934, as amended, in each case as in effect on the date or dates of such advances and such use of proceeds.

Section 2.19. Maximum Rate; Payment of Fee. Anything in this Agreement to the contrary notwithstanding, if the rate of interest due hereunder shall exceed the Maximum Rate for any period for which interest is payable, then (i) interest at the Maximum Rate shall be due and payable with respect to such interest period and (ii) interest at the rate equal to the difference between (A) the rate of interest calculated in accordance with the terms hereof without regard to the Maximum Rate and (B) the Maximum Rate (the “*Excess Interest*”), shall be deferred until such date as the rate of interest calculated in accordance with the terms hereof ceases to exceed the Maximum Rate, at which time SMUD shall pay to the Bank, with respect to amounts then payable to the Bank that are required to accrue interest hereunder, such portion of the deferred Excess Interest as will cause the rate of interest then paid to the Bank to equal the Maximum Rate, which payments of deferred Excess Interest shall continue to apply to such unpaid amounts hereunder until all deferred Excess Interest is fully paid to the Bank. To the extent permitted by law, upon the termination of the Available Commitment and/or this Agreement, in consideration for the limitation of the rate of interest otherwise payable hereunder, SMUD shall pay to the Bank a fee equal to the amount of all unpaid deferred Excess Interest.

ARTICLE THREE

CONDITIONS PRECEDENT

Section 3.1. Conditions Precedent to the effectiveness of this Agreement. As conditions precedent to the obligation of the Bank to establish the Available Commitment and execute and deliver this Agreement, SMUD shall provide to the Bank on the Closing Date, each in form and substance satisfactory to the Bank and its counsel, Chapman and Cutler LLP (hereinafter, “*Bank’s Counsel*”):

(i) *Approvals.* The Bank shall have received an executed counterpart of this Agreement duly executed by SMUD and the Bank and copies of all action taken by SMUD (including, without limitation, any resolution adopted or passed by SMUD in connection therewith) approving the execution and delivery by SMUD of this Agreement, the Fee

Agreement, the Bonds and the other Program Documents, in each case, certified by an authorized official of SMUD as complete and correct as of the date hereof.

(ii) *Incumbency of Officials.* The Bank shall have received an incumbency certificate of SMUD in respect of each of the officials who is authorized to (a) sign this Agreement, the Bonds and the other Program Documents on behalf of SMUD and (b) take actions for SMUD under this Agreement, the Bonds and the other Program Documents.

(iii) *Opinion of Bond Counsel.* The Bank shall have received an opinion of Bond Counsel or a reliance letter thereon.

(iv) *Opinion of Counsel to SMUD.* The Bank shall have received an opinion addressed to the Bank and dated the Closing Date of the general counsel for SMUD, in form and substance satisfactory to the Bank, and addressing (i) SMUD's existence, (ii) SMUD's power and authority to enter into this Agreement and the Fee Agreement and to perform its obligations hereunder and thereunder, (iii) SMUD's execution and delivery of this Agreement and the Fee Agreement, (iv) the enforceability of SMUD's obligations under this Agreement and the Fee Agreement, (v) that SMUD has obtained all consents necessary to execute, deliver and perform this Agreement and the Fee Agreement, (vi) the execution and delivery of this Agreement and the Fee Agreement by SMUD will not violate any law, order or agreement to which SMUD is subject or to which SMUD is a party, and (vii) there is no litigation pending or threatened against SMUD that would prevent SMUD from executing and delivering this Agreement and the Fee Agreement or performing its obligations hereunder and thereunder.

(v) *Bond Resolution and Other Program Documents.* The Bank shall have received (a) a certified copy of the Bond Resolution and the Master Bond Resolution (or a certified copy of the annotated version thereof) which have been adopted prior to the Closing Date, all certified by an authorized officer of SMUD as being in full force and effect and (b) fully executed or certified copies, as applicable, of all other Program Documents.

(vi) *Financial Information.* The Bank shall have received copies of any financial information of SMUD that the Bank may reasonably request.

(vii) *Legality; Material Adverse Change.* The Bank shall have determined (in its sole discretion) that (a) the consummation of any of the transactions contemplated by the Bond Resolution, the Bonds, this Agreement or any other Program Document will not violate any law, rule, guideline or regulation applicable to SMUD, the Bank, the Available Commitment, the Bonds or this Agreement, and (b) no Material Adverse Change shall have occurred since December 31, 2022.

(viii) *Fees, Etc.* The Bank shall have received payment of the fees, costs and expenses payable on the Closing Date.

(ix) *Bank Bonds.* The Bank shall have received written evidence satisfactory to the Bank that (A) a Bank Bond CUSIP number has been obtained and reserved from Standard & Poor’s CUSIP Service and (B) the Bank Bonds specifically have been assigned a long-term unenhanced rating of at least “BBB-” or greater by S&P or Fitch and (C) to the extent reasonably achievable, evidence that the CUSIP number and the rating assigned to such Bank Bonds are available electronically to the Bank pursuant to a third-party provider of such information.

(x) *Ratings.* The Bank shall have received written confirmation that on or prior to the Closing Date the Bonds have received the long-term unenhanced credit ratings of at least “AA-” from S&P and “AA” from Fitch.

(xi) *Closing Certificate.* The Bank shall have received a certificate from SMUD executed by the Authorized SMUD Representative, dated the Closing Date, stating that:

(a) the representations and warranties of SMUD contained in this Agreement and each certificate furnished or delivered by SMUD to the Bank pursuant hereto are true and correct on and as of the Closing Date as though made on and as of such date;

(b) no “default” or “event of default” under any Program Document to which SMUD is a party and no Default or Event of Default has occurred and is continuing or would result from the entering into or performance under this Agreement and the other Program Documents; and

(c) except as has been disclosed to the Bank in writing prior to the Closing Date, there has been no Material Adverse Change since December 31, 2022.

(xii) *Other Documents.* The Bank shall have received such other documents, certificates, and opinions as the Bank or the Bank’s counsel shall have reasonably requested.

(xiii) *Bank Counsel Opinion.* SMUD shall have received an opinion of Bank’s Counsel as to the Bank’s execution and delivery of this Agreement and the enforceability of the Bank’s obligations under this Agreement.

Section 3.2. Conditions Precedent to Bank’s Obligation to Purchase Tendered Bonds. The obligation of the Bank to purchase tendered Bonds hereunder on any Purchase Date is subject to the satisfaction of all of the following conditions, unless specifically waived in writing by the Bank with respect to a Purchase Date:

(a) No Immediate Termination Event shall have occurred and no Suspension Event shall have occurred and be continuing; and

(b) The Bank shall have received a Notice of Bank Purchase during the Purchase Period in the manner described in Section 2.3 hereof.

Section 3.3. Conditions Precedent to Term-Out. The obligation of the Bank to extend the extended amortization of the Bank Bonds in accordance with Section 2.11 hereof is subject to the satisfaction of the following conditions:

(a) receipt by the Bank of a Request for Purchase as required by Section 2.3(a) hereof;

(b) immediately before and as a result of giving effect to the extension of the extended amortization of the Bank Bonds in accordance with Section 2.11 hereof, no Credit Default or, Credit Event of Default, shall have occurred and be continuing; and

(c) immediately before and as a result of giving effect to the extension of the extended amortization of the Bank Bonds in accordance with Section 2.11 hereof no event described in clause (b) of the definition of Material Adverse Change shall have occurred.

ARTICLE FOUR

REPRESENTATIONS AND WARRANTIES

Section 4.1. Representations of SMUD. In order to induce the Bank to establish the Available Commitment and execute and deliver this Agreement, SMUD represents and warrants to the Bank as follows:

(a) *Existence and Power.* SMUD is a municipal utility district organized and existing under and by virtue of the Act, and is possessed of full powers to own and lease (as lessor and lessee) real and personal property, to own and operate the Electric System, to conduct its other business as presently conducted and to enter into contracts such as this Agreement and the SMUD Program Documents, which powers have been validly exercised in connection with the transactions effected by this Agreement and the SMUD Program Documents.

(b) *Authorization; Contravention; Approvals.* The execution, delivery and performance by SMUD of this Agreement, the Fee Agreement and the SMUD Program Documents and the other documents contemplated hereby and thereby are within the powers of SMUD, have been duly authorized by all necessary actions and (i) do not contravene the Act or any other law, rule, regulation, order, writ, judgment, injunction, decree, determination or award or any indenture, agreement, lease, instrument or other contractual restriction binding on or affecting SMUD and (ii) except as provided in or contemplated by this Agreement and the Program Documents, do not result in or require the creation of any Lien, security interest or other charge or encumbrance upon or with respect to any asset of SMUD. SMUD is not in violation of or in default in any material respect under any law, rule, regulation, order, writ, judgment, injunction, decree, determination or award that would prevent or is reasonably likely to prevent SMUD from performing its obligations under this Agreement or the SMUD Program Documents. SMUD is not in violation of or in default in any material respect under any indenture, agreement, lease, instrument or other contractual

restriction and is not in violation of or in default in any respect under any of the SMUD Program Documents that would prevent or is reasonably likely to prevent SMUD from performing its obligations under this Agreement or the SMUD Program Documents. No Default or Event of Default has occurred and is continuing. All orders, consents and other authorizations or approvals of all Governmental Authorities and all other Persons have been obtained (and no additional authorization, approval or other action by, and no notice to or filing or registration with, any Governmental Authority is required to be made or obtained by SMUD) for the due execution, delivery and performance by SMUD of this Agreement and the SMUD Program Documents.

(c) *Enforceability.* This Agreement and the SMUD Program Documents, and other documents contemplated hereby and thereby to which SMUD is a party or by which it is bound, are legally valid and binding obligations of SMUD enforceable against SMUD in accordance with their respective terms, except as such enforceability may be limited by (i) bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally; (ii) general principles of equity; (iii) the exercise of judicial discretion in appropriate cases; and (iv) to the limitations on legal remedies against municipal utility districts in the State of California.

(d) *Litigation.* Except as disclosed in the Official Statement or in writing to the Bank prior to the Closing Date, there are no actions, suits, proceedings, inquiries or investigations, at law or in equity, before any court, Governmental Authority or arbitrator pending or, to the best knowledge of SMUD, threatened, against or directly involving SMUD (including, without limitation, the ability of SMUD to establish and collect rates for the generation, transmission and distribution of electric power), affecting the existence of SMUD, the title of any officials to their respective offices or affecting or seeking to prohibit, restrain or enjoin the execution or delivery of this Agreement or any Program Document, or in any way contesting or affecting the validity or enforceability of the Bonds, this Agreement, any Program Document or contesting the tax-exempt status of the Bonds, or contesting in any way the completeness or accuracy of the Official Statement or any supplements or amendments thereto, or contesting the powers of SMUD or any authority for the issuance of the Bonds, the execution and delivery of this Agreement or the SMUD Program Documents, nor, to the best, knowledge of SMUD, is there any basis therefor, which, if determined adversely to SMUD (i) would adversely affect the validity or enforceability of, or the authority or ability of SMUD to perform its obligations under, this Agreement, the Fee Agreement or any SMUD Program Documents, (ii) would, in the reasonable opinion of SMUD, have a material adverse effect on the business, financial position or results of operations of SMUD or (iii) would adversely affect the exclusion of interest on the Bonds from gross income for Federal income tax purposes or the exemption of such interest from State of California personal income taxes.

(e) *Financial Information.* (i) The audited financial statements of SMUD included in the 2022 Financial Statements, true and correct copies of which have heretofore been delivered or made available to the Bank, fairly present, in conformity with generally accepted accounting principles the financial position of SMUD and its results of operations and changes in financial position at the dates and for the periods indicated.

(ii) Except as has been disclosed in writing to the Bank prior to the Closing Date, since December 31, 2022, there has been no material adverse change in the business, financial position

or results of operations of SMUD which could reasonably be expected to result in a material adverse effect on SMUD's ability to perform its obligations hereunder or thereunder or the rights, security or interests of the Bank.

(iii) Except as reflected in the financial statements included in the 2022 Financial Statements or as described in the Official Statement or as has been disclosed in writing to the Bank prior to the Closing Date and except for SMUD's obligations set forth in this Agreement and the SMUD Program Documents, there are as of the date hereof no liabilities or obligations with respect to SMUD of any nature whatsoever (whether absolute, accrued, contingent or otherwise and whether or not due) which, in the aggregate, would be material to SMUD. SMUD does not know of any basis for the assertion against SMUD of any liability or obligation of any nature whatsoever that is not reflected in the financial statements included in the 2022 Financial Statements or the Official Statement or other written disclosure to the Bank delivered prior to the Closing Date which, in the aggregate, could be material to SMUD.

(f) *Disclosure.* No written information furnished by SMUD to the Bank in connection with this Agreement (except information which has been superseded by subsequent information provided by SMUD) includes any untrue statement of a material fact.

(g) *Environmental Matters.* Except as disclosed in the Official Statement or in writing to the Bank prior to the Closing Date, SMUD has not received notice to the effect that the operations of the Electric System are not in compliance with any of the requirements of applicable Federal, state or local environmental, health and safety statutes and regulations or are the subject of any governmental investigation evaluating whether any remedial action is needed to respond to a release of any toxic or hazardous waste or substance into the environment, in each case which non-compliance or remedial action could have a Material Adverse Effect.

(h) *Plans.* SMUD currently has a Plan which is in compliance in all respects with the requirements of the applicable laws of the State of California, including without limitation the obligation to pay contributions on behalf of its employees in accordance therewith, and SMUD has no Plan which is subject to the requirements of ERISA. No condition exists or event or transaction has occurred with respect to any Plan which could reasonably be expected to result in the incurrence by SMUD of any material liability, fine or penalty.

(i) *Regulations U and X.* SMUD is not engaged in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulation U or X issued by the Board of Governors of the Federal Reserve System); and no proceeds of any amounts advanced by the Bank hereunder will be used to extend credit to others for the purpose of purchasing or carrying any margin stock.

(j) *Tax-Exempt Status.* SMUD has not taken any action or omitted to take any action, and knows of no action taken or omitted to be taken by any other Person, which action, if taken or omitted, would adversely affect the exclusion of interest on the Bonds from gross income for Federal income tax purposes or the exemption of such interest from State of California personal income taxes.

(k) *Security.* (i) The Bond Resolution creates, for the benefit of the Bonds, the Bank Bonds and all other Parity Subordinated Debt, a legally valid and binding pledge of the Net Subordinated Revenues, and there is no Lien on the Net Subordinated Revenues that ranks senior to or on a parity with the lien granted for the benefit of the Bonds, the Bank Bonds and all other Parity Subordinated Debt other than the pledge securing the Senior Bonds. Except as provided in the Master Bond Resolution, neither the Master Bond Resolution nor the Bond Resolution permits the issuance of Debt that is secured by the Net Revenues on a basis senior to the Bonds and Bank Bond. No filing, registering, or recording of the Bond Resolution or any other instrument is required to establish the pledge of or to perfect, protect or maintain the Lien on the Net Subordinated Revenues created thereby.

(b) This Agreement creates, for the benefit of all Obligations hereunder and under the Fee Agreement (other than the Bank Bonds) a fourth lien and charge on and pledge of the Net Revenues to secure the timely payment of all Obligations hereunder and under the Fee Agreement (other than the Bank Bonds). The lien on, pledge of and charge on Net Revenues all Obligations hereunder and under the Fee Agreement (other than the Bank Bonds) constitutes a valid pledge of and charge and lien upon the Net Revenues on a fourth lien basis. No filing, registering, or recording of this Agreement or any other instrument is required to establish the pledge of or to perfect, protect or maintain the fourth lien on the Net Revenues created hereby.

(l) *Constitutional Matters.* There is no amendment, or, to the best knowledge of SMUD, proposed amendment certified for placement on a statewide ballot, to the Constitution of the State of California or any published administrative interpretation of the Constitution of the State of California or any State of California law, or any legislation which has passed either house of the State legislature, or any published judicial decision interpreting any of the foregoing, the effect of which could reasonably be expected to have Material Adverse Effect.

(m) *No Sovereign Immunity.* SMUD represents that it is not entitled to claim immunity on the grounds of sovereignty or other similar grounds with respect to itself from (i) suit or (ii) jurisdiction of any court because of its status as a political subdivision of the State of California.

(n) *Incorporation of Representations and Warranties by Reference.* SMUD hereby makes to the Bank every representation and warranty made by it in SMUD Program Documents, which representations and warranties, as well as the defined terms contained therein that are necessary for a correct interpretation thereof, are incorporated herein by this reference with the same effect as if each and every such provision and defined term were set forth herein in its entirety. No amendment, modification, termination or replacement of any such representations, warranties, covenants and definitions contained in the SMUD Program Documents shall be effective to amend, modify, terminate or replace the representations, warranties, covenants and definitions incorporated herein by this reference, without the prior written consent of the Bank. The representations and warranties of SMUD in all of the SMUD Program Documents are true and correct in all material respects.

(o) *No Violation of Usury Laws.* The terms of the Bond Resolution regarding the calculation and payment of interest on the Bonds and the Bank Bonds do not violate any applicable usury laws of the State of California and, assuming that the Bank is an exempted class of persons

within the meaning of Article 15 of the California Constitution, the terms of this Agreement, the Fee Agreement, the Bank Bonds and the Bonds regarding the calculation and payment of interest and fees and other amounts due under this Agreement, the Fee Agreement, the Bank Bonds and the Bonds do not violate any applicable usury laws of the State of California.

(p) *Compliance.* SMUD is in substantial compliance with all laws, ordinances, orders, rules and regulations applicable to it, except to the extent noncompliance could not reasonably be expected to result in a Material Adverse Effect.

(q) *Default.* SMUD is not in default in the performance, observance or fulfillment of any of the obligations, covenants or conditions contained in any SMUD Program Document, the Master Bond Resolution, the Bond Resolution or any other resolution, agreement or instrument to which it is a party which could have a Material Adverse Effect. No Default or Event of Default has occurred and is continuing.

(r) *Insurance.* The properties of SMUD are insured in accordance with the terms of the Master Bond Resolution.

(s) *Taxes.* SMUD has filed any Federal, state and other material tax returns and reports required to be filed, and has paid all Federal, state and other material taxes, assessments, fees and other governmental charges levied or imposed upon it or its properties, income or assets otherwise due and payable, except those which are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been provided in accordance with generally accepted accounting principles. There is no proposed tax assessment against SMUD that would, if made, have a Material Adverse Effect.

(t) *Casualty.* Neither the business nor the Property of SMUD is currently affected by any fire, explosion, accident, strike, lockout or other labor dispute, drought, storm, hail, earthquake, embargo, act of God or of the public enemy or other casualty (whether or not covered by insurance), which could have a Material Adverse Effect.

(u) *Sanctions Concerns; Anti-Corruption Laws.* (i) *Sanctions Concerns.* Neither SMUD, nor, to the knowledge of SMUD, any director, officer, or employee thereof, is (A) currently the subject or target of any Sanctions, (B) included on OFAC's List of Specially Designated Nationals, or (C) located, organized or resident in a Designated Jurisdiction.

(ii) *Anti-Corruption Laws.* SMUD has conducted its business in compliance with the United States Foreign Corrupt Practices Act of 1977 and other similar anti-corruption legislation applicable in California, and has instituted and maintained policies and procedures designed to promote and achieve compliance with such laws.

(iii) *Anti- Money Laundering Laws.* To the best of SMUD's knowledge, after due care and inquiry, SMUD is not under investigation for an alleged violation of anti-money laundering laws by a governmental authority that enforces such laws.

(v) *Anti-Terrorism Laws.* (i) SMUD is not in violation of any laws relating to terrorism or money laundering (“*Anti-Terrorism Laws*”), including Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001 (the “*Executive Order*”), and the Patriot Act;

(ii) SMUD is not any of the following:

(A) a Person that is listed in the annex to, or is otherwise subject to the provisions of, the Executive Order;

(B) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, the Executive Order;

(C) a Person with which the Bank is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law;

(D) a Person that commits, threatens or conspires to commit or supports “terrorism” as defined in the Executive Order; or

(E) a Person that is named as a “specially designated national and blocked person” on the most current list published by the Office of Foreign Asset Control (“*OFAC*”) or any list of Persons issued by OFAC pursuant to the Executive Order at its official website or any replacement website or other replacement official publication of such list;

(iii) SMUD is an electrical utility. To its knowledge, SMUD does not (A) conduct any business or engage in making or receiving any contribution of funds, goods or services to or for the benefit of any Person described in subsection (ii)(B) above, (B) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to the Executive Order or (C) engage in or conspires to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law.

(w) *Trustee and Remarketing Agent.* U.S. Bank Trust Company, National Association (or a successor or assign approved in writing by the Bank) is the duly appointed and acting Trustee and Barclays Capital Inc., (or a successor or assign approved in writing by the Bank) is the duly appointed Remarketing Agent.

ARTICLE FIVE

COVENANTS

Section 5.1. Covenants of SMUD. SMUD will do the following so long as any amounts may be drawn hereunder or any Obligations remain outstanding under this Agreement, unless the

Bank shall otherwise consent in writing:

(a) *Reports and Other Information.* SMUD will furnish, or cause to be furnished, at SMUD's expense to the Bank:

(i) As soon as possible and in any event within five (5) Business Days after the knowledge (actual or constructive) or notice of the occurrence of any Event of Default, a statement of the Authorized SMUD Representative setting forth details of such Event of Default and the action that SMUD proposes to take with respect thereto;

(ii) As soon as available and in any event within two hundred ten (210) days after the end of each Fiscal Year of SMUD, a copy of the audited financial statements of SMUD for such year, including a balance sheet of SMUD as at the end of such Fiscal Year and the related statements of revenues, expenses and changes in fund balances and statement of cash flows, all in reasonable detail and reported on by a firm of nationally recognized independent certified public accountants, and the report of such firm of independent certified public accountants shall state, without qualification, that such financial statements present fairly the financial position of SMUD as of the end of such Fiscal Year, the results of operations, the changes in fund balances and cash flows of SMUD for such Fiscal Year then ended in conformity with generally accepted accounting principles;

(iii) Simultaneously with the delivery of each set of financial statements referred to in clause (ii) above, a certificate of an Authorized SMUD Representative stating whether there exists on the date of such certificate any Event of Default or Default and, if any Event of Default or Default then exists, setting forth the details thereof and the action that SMUD is taking or proposes to take with respect thereto;

(iv) *Unaudited Quarterly Financials.* As soon as available and in any event within 60 days after March 31, June 30 and September 30 of each calendar year, a copy of the unaudited internally prepared balance sheet and statement of changes in net asset of SMUD for the three month period ended on such date, setting forth in each case in comparative form the corresponding figures for the corresponding fiscal period for the preceding fiscal year, all in reasonable detail, prepared in accordance with generally accepted accounting principles, consistently applied, together with a compliance certificate signed by an Authorized SMUD Representative stating that no Event of Default or Default has occurred, or if such Event of Default or Default has occurred, specifying the nature of such Event of Default or Default, the period of its existence, the nature and status thereof and any remedial steps taken or proposed to correct such Event of Default or Default.

(v) As soon as practicable and in any event within ten (10) Business Days after SMUD obtains actual knowledge of: (A) any litigation, arbitration or governmental proceeding pending against SMUD that challenges SMUD's ability to perform its obligations under this Agreement and/or the SMUD Program Documents; or (B) any other event or condition that would prevent or is reasonably likely to prevent SMUD from performing its obligations under this Agreement and/or the SMUD Program Documents,

in each case with a statement of the Authorized SMUD Representative setting forth details describing the same and the steps being taken with respect thereto;

(vi) As soon as practicable, notice of any disclosure documents publicly distributed in connection with any issue of Senior Bonds or Parity Subordinated Debt;

(vii) As soon as practicable, notice of any change in, or the withdrawal of, any rating of Senior Bonds or Parity Subordinated Debt (without regard to bond insurance or any other form of credit enhancement) by any Rating Agency; and

(viii) From time to time, such additional information regarding the financial position, results of operations, business or prospects of SMUD as the Bank may reasonably request.

(b) *Books and Records; Inspections.* SMUD will keep proper books of record and account with respect to the Electric System in which full and correct entries shall be made of assets and liabilities, financial transactions and business of SMUD in conformity with generally accepted accounting principles. SMUD will upon reasonable notice permit any Person designated by the Bank in writing to visit any of the properties of SMUD, and to examine the books and financial records of SMUD relating to the Electric System and make copies thereof or extracts therefrom, and to discuss the affairs, finances and accounts of SMUD relating to SMUD with the principal officers of SMUD all at such reasonable times during normal business hours and as often as the Bank may reasonably request.

(c) *Maintain Existence.* SMUD shall take no action that would terminate its existence, rights and franchises as a municipal utility district duly organized and existing under the Constitution and laws of the State of California.

(d) *Compliance with Laws.* SMUD will comply with the requirements of all laws, rules, regulations and orders of any Governmental Authority having jurisdiction over SMUD and/or the Electric System, noncompliance with which would materially adversely affect the ability of SMUD to perform its obligations under this Agreement and the SMUD Program Documents.

(e) *Compliance with Agreements.* SMUD will observe and perform all of its obligations under this Agreement and the SMUD Program Documents.

(f) *Incorporation of Covenants by Reference.* SMUD, by this reference, hereby incorporates into this Agreement those covenants and agreements made by it in Sections 3.02, 3.05, 3.06 and 6.08 of the Master Bond Resolution (as in effect on the effective date of this Agreement) and in the SMUD Program Documents, as such covenants and agreements exist on the date hereof, as if such covenants and agreements were set forth herein in their entirety together with all defined terms and interpretative provisions necessary for a complete understanding thereof. The incorporated provisions shall be in addition to the express covenants contained herein and shall not be limited by the express covenants contained herein nor shall the incorporated provisions be a limitation on the express covenants contained herein. In the event of a conflict between the covenants and agreements set forth in this Article Five (other than the incorporated

provisions) and the incorporated provisions, the covenants and agreements set forth in the other provisions of Article Five shall prevail.

(g) *SMUD Program Documents.* SMUD will not amend, supplement or otherwise modify, or agree to the amendment, modification or termination of, any of the SMUD Program Documents (including, without limitation, an amendment to the Bond Resolution reducing the Maximum Interest Rate with respect to the Bonds to a rate below 12%) if such action could reasonably be expected to (i) adversely affect SMUD's ability to perform its obligations under this Agreement or the SMUD Program Documents, (ii) adversely affect the business, financial position or results of operations of SMUD or (iii) adversely affect the rights, interests, security or remedies of the Bank, in each case, without the prior written consent of the Bank (the Bank shall provide SMUD its determination as to whether or not it consents to any amendment, supplement or modification to any SMUD Program Documents within ten (10) Business Days of written notice from SMUD of such amendment, supplement or modification). SMUD shall provide written notice to the Bank of any proposed amendment to the Master Bond Resolution or Bond Resolution (and a copy of such proposed amendment) at least ten (10) calendar days prior to its effective date.

(h) *Trustee; Remarketing Agent.* SMUD shall not appoint a successor Trustee or Remarketing Agent without the prior written consent of the Bank (which consent shall not be unreasonably withheld).

(i) *Alternate Liquidity Facility.* SMUD agrees that any termination of the Available Commitment and this Agreement as a result of the provision of any Alternate Liquidity Facility will require, as a condition thereto, that SMUD or the issuer of the Alternate Liquidity Facility will provide funds on the date of such termination or provision, which funds will be sufficient to pay in full at the time of termination of the Available Commitment all Obligations due to the Bank hereunder. SMUD shall use commercially reasonable efforts to obtain an Alternate Liquidity Facility to replace this Agreement (such replacement to occur on or before any mandatory purchase date established pursuant to the Bond Resolution) or cause the Bonds to be converted to bear interest in an interest rate mode other than the Daily Rate or the Weekly Rate in the event that (i) the Bank shall determine not to extend the Facility Maturity Date pursuant to the terms hereof, (ii) SMUD terminates this Agreement pursuant to the terms hereof or (iii) the Bank shall furnish a Termination Notice in the form of Exhibit B to the Trustee or notice of the occurrence of a Suspension Event.

(j) *Remarketing Agents.* SMUD will at all times cause the Remarketing Agent to use its best efforts to remarket Bonds (including, without limitation, Bank Bonds) up to the maximum rate provided therefor in the Supplemental Resolution and the Remarketing Agreement (such maximum rate on the Closing Date is equal to twelve percent (12%) per annum pursuant to Section [] of the Remarketing Agreement); *provided, however*, that nothing herein shall prohibit SMUD from purchasing tendered Bonds for its own portfolio. SMUD shall not direct any Remarketing Agent to cease its attempts to remarket Bonds tendered for purchase for any reason (including without limitation that any interest rate charged hereunder may be less than the interest rate that would be required to be paid to any potential purchaser of such Bonds in order that the Bonds may be sold at a purchase price equal to the par value thereof plus accrued interest thereon). If the Remarketing Agent fails to remarket any Bank Bonds for 15 consecutive calendar days, or

otherwise fails to perform its duties under the Remarketing Agreement, then SMUD agrees, at the written request of the Bank, to cause the Remarketing Agent to be replaced with a Remarketing Agent satisfactory to the Bank. In addition, SMUD can remove the Remarketing Agent without cause, after appropriate notice, provided that the replacement Remarketing Agent is acceptable to the Bank. SMUD shall provide under the Remarketing Agreement for any replacement Remarketing Agent that the Remarketing Agent may not resign until at least 30 days have elapsed following the Remarketing Agent's giving of notice to SMUD and the Bank of such resignation.

(k) *Tax-Exempt Status.* SMUD shall not take any action or omit to take any action, which action, if taken or omitted, would adversely affect the exclusion of interest on the Bonds from gross income for Federal income tax purposes or the exemption of such interest from State of California personal income taxes.

(l) *Offering Documents.* SMUD shall not make reference to the Bank in any offering document without the Bank's prior written consent thereto (other than references to the name of the Bank solely in the Bank's capacity as the liquidity provider with respect to the Bonds). Except as may be required by law (including, but not limited to, federal and state securities laws), SMUD shall not use the Bank's name (other than references to the name of the Bank solely in the Bank's capacity as the liquidity provider with respect to the Bonds) in any published materials (other than SMUD's staff reports, annual statements, audited financial statements, rating agency presentations) without the prior written consent of the Bank.

(m) *Use of Proceeds.* The proceeds of the advances hereunder by the Bank will be expended in the manner set forth in the Bond Resolution and in not in violation of any applicable law.

(n) *Ranking of Obligations.* SMUD shall not take any action that would result in the Bank Bonds not ranking at least pari passu in right of payment from Net Subordinated Revenues with the Bonds and the Parity Subordinated Debt.

(o) *Investments.* SMUD will not, directly or indirectly, invest in instruments and securities other than those permitted by, and in accordance with, California Government Code Sections 53600 to 53609, the Master Bond Resolution, the Bond Resolution or the Program Documents. SMUD will not permit SMUD to encumber its cash position nor schedule the interest payment dates and maturities of its investments in a manner which impedes, hinders or interferes with the availability of funds to meet SMUD's expected cash needs.

(p) *Reserved.*

(q) *Plans.* SMUD will (i) remain at all times in compliance with any applicable law (including any legally available grace periods) with respect to any Plan, and (ii) maintain each Plan as to which it may have any liability in compliance in all material respects with the provisions of applicable law, the failure to comply with which could subject SMUD to any tax or penalty which tax or penalty, taken together, with all other taxes and penalties which could be assessed against SMUD by reason of all other non-compliances, would have a material adverse effect on the business, financial position or results of operations of SMUD.

(r) *Payment of Taxes, Etc.* SMUD will pay and discharge, or cause to be paid and discharged, all taxes, assessments and other governmental charges which may hereafter be lawfully imposed upon SMUD on account of the Electric System or any portion thereof and which, if unpaid, might impair the security of the Bonds, when the same shall become due, but nothing herein contained shall require SMUD to pay any such tax, assessment or charge so long as it shall in good faith contest the validity thereof. SMUD will duly observe and conform to all valid material requirements of any Governmental Authority relative to the Electric System or any part thereof.

(s) *Operation and Maintenance of Electric System.* SMUD will operate, maintain and preserve the Electric System in good repair and working order in conformity with standards customarily followed for municipal power supply, transmission and distribution systems of like size and character. SMUD will from time to time make necessary and proper repairs, renewals, replacements and substitutions to the properties of the Electric System, so that business carried on in connection with the Electric System shall and can be conducted in an efficient and economical manner, and will operate the Electric System in an efficient and economical manner. SMUD shall not use the Electric System to conduct any business other than that which is lawfully permitted.

(t) *Amounts of Rates and Charges.* To the extent permitted by law, SMUD hereby covenants to establish, maintain and collect rates and charges with respect to the Electric System sufficient to pay the Senior Bonds, Parity Subordinated Debt, including the Bonds and Bank Bonds and all other Obligations due and owing hereunder.

(u) *Maintenance of Insurance.* SMUD maintains self-insurance for general liabilities, property damage and workers' compensation claims. SMUD shall, at all times, continue to maintain such self-insurance or shall use its best efforts to maintain or cause to be maintained insurance or reserves against loss from such hazards and risks to the person or property of others as are usually insured or reserved against by those with rights and interests in property similar to the Electric System. SMUD shall also procure, and maintain at all times adequate fidelity insurance or bonds on all officers and employees handling or responsible for any Electric System revenues, such insurance or bonds to be in an aggregate amount at least equal to the maximum amount of such Electric System revenues at any one time in the custody of all such officers and employees or in the amount of one million dollars (\$1,000,000), whichever is less. The insurance described above may be provided as a part of any comprehensive fidelity and other insurance and not separately for the Electric System.

(v) *Sale or Other Disposition of Property.* SMUD will not sell or otherwise dispose of any property essential to the proper operation of the Electric System or to the maintenance of the Revenues. SMUD will not enter into any lease or agreement which impairs or impedes the operation of the Electric System or which otherwise impairs or impedes the rights of the Bondholders (as defined in the Master Bond Resolution) or the Bank with respect to Revenues. Subject to the preceding sentence, nothing contained herein shall prevent SMUD from entering into sale and leaseback agreements pursuant to which SMUD may acquire the use of property subject to the terms of such sale and leaseback agreements.

Notwithstanding the foregoing or any other provision of the Master Bond Resolution,

SMUD may sell or otherwise dispose of its accounts receivable and customer loan balances due to SMUD *provided* that:

(1) SMUD delivers to the Trustee:

(a) a certificate of SMUD to the effect that the amount derived by SMUD from the sale or other disposition of such accounts receivable or loan balances is a result of the sale or other disposition of such accounts receivable or loan balances upon fair and reasonable terms no less favorable to SMUD than the terms of a comparable arm's-length transaction treated as a sale and not a loan under generally accepted accounting principles; and

(b) a written statement or report of an independent certified public accountant to the effect that, based on the audited financial statements of SMUD for the most recent fiscal year for which audited financial statements are available and after giving effect to such transaction by reducing Revenues for such fiscal year by the difference between the face amount of such accounts receivable or loan balances and the amount derived by SMUD from the sale or other disposition of such accounts receivable or loan balances, the debt service ratio computed pursuant to Section 5.04 of the Master Bond Resolution would not have been reduced to less than 1.40:1.0.

(w) *Liens.* Except as permitted by the Master Bond Resolution or the Bond Resolution or as otherwise acceptable to the Bank, SMUD will not (a) issue any bonds, notes or other evidences of indebtedness of similar nature payable out of or secured by a security interest in or a pledge or assignment of the Electric System revenues pledged under the Master Bond Resolution or the Bond Resolution and held or set aside by SMUD thereunder, or (b) create or cause to be created any Lien on the Electric System revenues. SMUD shall not, directly or indirectly, incur, create or permit to exist any Lien on all or any portion of the Electric System revenues that would affect the priority of Liens in existence on the Closing Date.

(x) *Reserved.*

(y) *Further Assurances.* SMUD agrees to do such further acts and things and to execute and deliver to the Bank such additional assignments, agreements, powers and instruments as the Bank may reasonably require or reasonably deem advisable to carry into effect the purposes of this Agreement and the Fee Agreement or to better assure and confirm to the Bank its rights, powers and remedies hereunder and under the SMUD Program Documents.

(z) *Immunity.* SMUD covenants that it will not claim immunity on the grounds of sovereignty or other similar grounds with respect to itself from (i) suit or (ii) jurisdiction of any court because of its status as a political subdivision of the State of California.

(aa) *Ratings.* SMUD shall maintain a long-term unenhanced rating from at least one Rating Agency on its Bonds.

(bb) *Swap Contracts.* Without the prior written consent of the Bank, SMUD shall not enter into any Swap Contracts relating to Debt wherein any termination payments thereunder are senior to or on parity with the payment of any Obligation.

(cc) *Shorter Amortization.* In the event that SMUD shall, directly or indirectly, enter into or otherwise consent to any Bank Agreement relating to Parity Subordinated Debt or other Debt of SMUD secured by a lien on Net Subordinated Revenues on parity with the Bonds which such Bank Agreement provides such Person with a shorter amortization period than what is set forth in Section 2.11 hereof (not taking into account any shorter amortization period that might occur under such Bank Agreement because of a default, termination event, or other similar event under such Bank Agreement) (each a "*Shorter Amortization Period*"), SMUD shall provide the Bank with a copy of each such Bank Agreement and such Shorter Amortization Period shall automatically be deemed to be incorporated into this Agreement and the Bank shall have the benefit of such Shorter Amortization Period as if specifically set forth herein. SMUD shall promptly enter into an amendment to this Agreement to include such Shorter Amortization Period; *provided* that the Bank shall have and maintain the benefit of such Shorter Amortization Period even if SMUD fails to provide such amendment.

(dd) *Incorporation of Covenants by Reference.* SMUD agrees that it will perform and comply with each and every covenant and agreement required to be performed or observed by it in Sections 3.02, 3.05, 3.06 and 6.08 of the Master Bond Resolution and in each of the Program Documents, which provisions, as well as related defined terms contained therein, are hereby incorporated by reference herein with the same effect as if each and every such provision were set forth herein in its entirety all of which shall be deemed to be made for the benefit of the Bank and shall be enforceable against SMUD. To the extent that any such incorporated provision permits SMUD or any other party to waive compliance with such provision or requires that a document, opinion or other instrument or any event or condition be acceptable or satisfactory to SMUD or any other party, for purposes of this Agreement, such provision shall be complied with unless it is specifically waived by the Bank in writing and such document, opinion or other instrument and such event or condition shall be acceptable or satisfactory only if it is acceptable or satisfactory to the Bank which shall only be evidenced by the written approval by the Bank of the same. No termination or amendment to such covenants and agreements or defined terms or release of SMUD with respect thereto made pursuant to the Master Bond Resolution or the Program Documents, shall be effective to terminate or amend such covenants and agreements and defined terms or release SMUD with respect thereto in each case as incorporated by reference herein without the prior written consent of the Bank. Notwithstanding any termination or expiration of the Master Bond Resolution or the Program Documents, SMUD shall continue to observe such incorporated covenants therein contained for the benefit of the Bank until the termination of this Agreement and the payment in full of all Obligations. All such incorporated covenants shall be in addition to the express covenants contained herein and shall not be limited by the express covenants contained herein nor shall such incorporated covenants be a limitation on the express covenants contained herein.

ARTICLE SIX

DEFAULTS

The occurrence of any of the following events set forth in Sections 6.1 and 6.2 (whatever the reason for such event and whether voluntary, involuntary, or effected by operation of Law) shall be an “*Event of Default*” hereunder, unless waived in writing by Bank:

Section 6.1. Events of Default not Permitting Immediate Termination or Suspension. The following events constitute Events of Default that do not permit immediate termination or suspension of the obligations of the Bank to purchase Eligible Bonds hereunder:

(a) SMUD shall fail to pay when due (i) the principal of Bank Bonds which amounts have become immediately due and payable as a result of an Event of Default or (ii) any other amounts due and owing under this Agreement or the Fee Agreement and such failure to continue for a period of three (3) Business Days; or

(b) SMUD shall (i) default in the due performance or observance by it of any term, covenant or agreement contained in Sections 5.1(a)(i), 5.1(c), 5.1(f), 5.1(g), 5.1(i), 5.1(l), 5.1(m), 5.1(n), 5.1(t), 5.1(v), 5.1(w), 5.1(x) or 5.1(z); (ii) default in the due performance or observance by it of any other term, covenant or agreement contained in Sections 5.1(a)(v), 5.1(a)(vi) or 5.1(a)(vii) and such default shall continue unremedied for a period of 5 Business Days; (iii) default in the due performance or observance by it of any other terms, covenant or agreement contained in Section 5.1(a)(ii), 5.1(a)(iii), 5.1(a)(iv) or 5.1(a)(viii) and such default shall continue unremedied for a period of 5 Business Days after the Bank has provided written notice to SMUD; or (iv) default in the due performance or observance by it of any other term, covenant or agreement hereunder or under the Fee Agreement (other than those referred to in Section 6.1(a), 6.1(b)(i), 6.1(b)(ii) or 6.1(b)(iii) hereof) and such default shall continue unremedied for a period of thirty (30) days; or

(c) Any representation, warranty, certification or statement made or deemed made by SMUD in this Agreement, any Program Document or in any certificate, financial statement or other document delivered to the Bank pursuant to this Agreement shall prove when made or deemed made, in the reasonable judgment of the Bank, to have been inaccurate and misleading in any material respect; or

(d) SMUD shall (i) default in any payment of (A) any Debt payable from or secured by Net Revenues beyond the period of grace (not to exceed 30 days), if any, provided in the instrument or agreement under which such Debt was created or (B) any obligation under any Swap Contract the obligations under which are secured by a lien on Net Revenues senior to or on a parity with the Bonds and Bank Bonds, or (ii) default in the observance or performance of any agreement or condition relating to any Debt payable from or secured by Net Revenues on parity with or senior to the Bonds and Bank Bonds or Swap Contract or Bank Agreement the obligations under which are payable from or secured by Net Revenues on parity with or senior to the Bonds and Bank Bonds contained in any instrument or agreement evidencing, securing or relating thereto, or any other event

shall occur or condition exist, the effect of which default or other event or condition is to cause, or to permit (A) the holder or holders (or a trustee or agent on behalf of such holder or holders) of any Debt or (B) the counterparty under any Swap Contract or Bank Agreement, in each case, payable from or secured by Net Revenues on parity with or senior to the Bonds and Bank Bonds to cause, with the giving of notice if required, such Debt or obligations under such Swap Contract or Bank Agreement to become due prior to its stated maturity; or (iii) any Debt payable from or secured by a lien on Net Revenues senior to or on a parity with the Bonds and Bank Bonds or Swap Contract or Bank Agreement the obligations under which are payable from or secured by Net Revenues on parity with or senior to the Bonds and Bank Bonds shall be declared to be due and payable, or required to be prepaid other than by a regularly scheduled required prepayment, prior to the stated maturity thereof; or

(e) Any of the funds or accounts established pursuant to the Master Bond Resolution or the Bond Resolution or any funds or accounts on deposit, or otherwise to the credit of, such funds or accounts shall become subject to any stay, writ, judgment, warrant of attachment, execution or similar process by any of the creditors of SMUD relating to an obligation or obligations of SMUD in excess of \$10,000,000 and such stay, writ, judgment, warrant of attachment, execution or similar process shall not be released, vacated or stayed within fifteen (15) days after its issue or levy; or

(f) (i) Any event which materially and adversely affects the ability of SMUD to observe and perform its obligations under this Agreement or the Fee Agreement shall have occurred and be continuing, (ii) any event which materially and adversely affects the ability of SMUD to observe and perform its obligations under any SMUD Program Document, the Master Bond Resolution or the Bond Resolution shall have occurred and be continuing or (iii) either the Master Bond Resolution or the Bond Resolution shall be amended and such amendment materially and adversely affects the ability of SMUD to observe and perform its obligations under this Agreement or the Fee Agreement; or

(g) An “event of default” (or similar event) shall have occurred under any of the Program Documents, the Master Bond Resolution or the Bond Resolution; or

(h) There shall be appointed or designated with respect to SMUD, an entity such as an organization, board, commission, authority, agency or body to declare a financial emergency or similar state of financial distress with respect to it or there shall be declared by it or by any legislative or regulatory body with competent jurisdiction over it, the existence of a state of financial emergency or similar state of financial distress in respect of it; or

(i) The (i) downgrade by any Rating Agency of its long-term unenhanced rating with respect to any Bonds or any Parity Subordinated Debt to a level below “Baa1” (or its equivalent) in the case of Moody’s, “BBB+” (or its equivalent) in the case of S&P or “BBB+” (or its equivalent) in the case of Fitch or (ii) suspension or withdrawal by any Rating Agency of its respective long-term unenhanced rating on any Bonds or any Parity Subordinated Debt for credit-related reasons; or

(j) (i) A court of competent jurisdiction or other governmental authority with appropriate jurisdiction over SMUD shall enter a final and non-appealable judgment, order or decree declaring any (x) any obligation of SMUD contained in this Agreement, any Program Document, the Master Bond Resolution or the Bond Resolution or (y) Program Document, the Master Bond Resolution or the Bond Resolution, in either case, to be invalid, not binding or unenforceable against SMUD or (ii) any action is taken by the SMUD Board or any officer of SMUD authorized by the SMUD Board to contest the validity or enforceability of this Agreement, any other Program Document, the Master Bond Resolution or the Bond Resolution or the SMUD Board or any officer of SMUD authorized by the SMUD Board repudiates its obligations under any Program Document, the Master Bond Resolution or the Bond Resolution or any provision thereof or with respect to any Debt of SMUD secured by or payable from Net Revenues senior to or on a parity with the Bonds and Bank Bonds, or SMUD shall seek an adjudication that this Agreement, any other Program Document, the Master Bond Resolution or the Bond Resolution is not valid and binding.

Section 6.2. Events of Default Permitting Immediate Termination or Suspension. The following events constitute Events of Default that permit immediate termination or suspension, as applicable, of the obligations of the Bank to purchase Eligible Bonds hereunder:

(a) SMUD shall commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of itself or any substantial part of its property, or shall consent to any such relief or to the appointment of or taking possession by any such official in an involuntary case or other proceeding commenced against it, or shall make a general assignment for the benefit of creditors, or shall fail generally, or in the reasonable judgment of the Bank be unable, to pay its debts as they become due, or shall take any action to authorize any of the foregoing; or

(b) An involuntary case or other proceeding shall be commenced against SMUD seeking liquidation, reorganization or other relief with respect to it or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its property and such case or proceeding is not controverted within thirty (30) days and dismissed within sixty (60) days; or an order for relief shall be entered against SMUD under the Federal bankruptcy laws as now or hereafter in effect; or

(c) (i) A court of competent jurisdiction or other governmental authority with appropriate jurisdiction over SMUD shall enter a final and non appealable judgment, order or decree declaring the obligation of SMUD with respect to the principal of or interest on the Bank Bonds and the Obligations or the pledge of the Net Subordinated Revenues securing the Bank Bonds contained in the Bond Resolution to be invalid, not binding or unenforceable against SMUD or (ii) any action is taken by the SMUD Board or any officer of SMUD authorized by the SMUD Board to contest the validity or enforceability of any provision of this Agreement, any other Program Document, the Master Bond Resolution

or the Bond Resolution relating to the payment of the principal of or interest on the Bank Bonds or the Obligations or the security therefor or the SMUD Board or any officer of SMUD authorized by the SMUD Board repudiates its obligation to pay the principal of or interest on the Bank Bonds or the Obligations or the security therefor or with respect to any Debt of SMUD secured by or payable from Net Revenues senior to or on a parity with the Bonds and Bank Bonds, or SMUD shall seek an adjudication that any provision of this Agreement, any other Program Document, the Master Bond Resolution or the Bond Resolution relating to the payment of the principal of or interest on the Bank Bonds or the Obligations or the security therefor is not valid and binding; or

(d) Any failure, in whole or in part, (i) to make timely any payment of principal of, interest on or redemption premium, if any, required to be made on the Bonds or Bank Bonds (other than failure to pay principal of or redemption premium, if any, on Bank Bonds which has become immediately due and payable as a result of the occurrence of an Event of Default), or (ii) to make timely any payment of principal of, interest on or redemption premium, if any, required to be made on any Modified Parity Debt beyond the period of grace (not to exceed 30 days) (other than failure to pay the principal, redemption premium, or interest of any bonds purchased by a Person providing a letter of credit, reimbursement agreement, liquidity facility or similar instrument pursuant to a liquidity drawing thereunder, which payment or repayment has been accelerated and is immediately due and payable after the occurrence of an event of default under any such agreement) or obligations under Swap Contracts (a) that provide interest rate support and (b) with respect to obligations under Swap Contracts that constitute regularly scheduled payments that relate to bonds, debentures, notes, loan agreements, bank agreements or other similar instruments issued by or on behalf of SMUD and (c) the payment of which is secured by a pledge of or Lien on Net Revenues senior to or on a parity with the payment of the Bonds and Bank Bonds.

(e) A moratorium shall have been declared or announced by a Governmental Authority (whether or not in writing) with respect to any Debt of SMUD secured by Revenues senior to or on a parity with the Bonds and Bank Bonds; or

(f) Dissolution or termination of the existence of SMUD; or

(g) A court of competent jurisdiction shall enter a final and non-appealable judgment, order or decree for the payment of money in excess of \$10,000,000 shall be rendered against SMUD and such judgment or order shall continue, unbonded or unsatisfied for a period of 60 days; or

(h) The suspension or withdrawal by each Rating Agency of its respective long-term unenhanced rating on any Bonds or any Parity Subordinated Debt for credit-related reasons or downgrade by each Rating Agency of its long-term unenhanced rating with respect to any Bonds or any Parity Subordinated Debt to a level below “Baa3” (or its equivalent) in the case of Moody’s, “BBB-” (or its equivalent) in the case of S&P and “BBB-” (or its equivalent) in the case of Fitch; or

(i) Any pledge or security interest created by this Agreement, any Program Document, the Master Bond Resolution or the Bond Resolution to secure the Bonds or Bank Bonds shall fail to be fully enforceable with the priority required hereunder or thereunder.

Section 6.3. Remedies. Upon the occurrence of an Event of Default, the Bank may take one or more of the following actions:

(a) In the case of any Event of Default specified in Section 6.2 hereof (other than a Suspension Event) (each, an “*Immediate Termination Event*”), the Available Commitment shall immediately be reduced to zero, in which case the obligations of the Bank to purchase Eligible Bonds shall immediately terminate without notice or demand and, thereafter, the Bank shall be under no obligation to purchase Eligible Bonds. Promptly upon such Event of Default, the Bank shall give written notice of same to the Trustee, SMUD and the Remarketing Agent; *provided*, that the Bank shall incur no liability or responsibility whatsoever by reason of its failure to give such notice, and such failure shall in no way effect the termination of the Available Commitment and of the obligations of the Bank to purchase Eligible Bonds pursuant to this Agreement. The Trustee shall immediately notify all owners of the termination of the Available Commitment and the obligation of the Bank to purchase the Eligible Bonds.

(b) In the case of an Event of Default specified in Section 6.2(c)(ii) hereof (following the entry of a judgment subject to further proceedings and prior to the entry of a final, non-appealable judgment) (a “*Suspension Event*”), the Bank’s obligation to purchase Eligible Bonds shall be immediately suspended without notice or demand and thereafter the Bank shall be under no obligation to purchase Eligible Bonds until such obligation is reinstated pursuant to this Section 6.3(b). Promptly upon the Bank obtaining knowledge of any such Suspension Event, the Bank shall give written notice to SMUD, the Trustee and the Remarketing Agent of such suspension; *provided* that the Bank shall incur no liability or responsibility whatsoever by reason of its failure to give such notice and such failure shall in no way affect the suspension of the Bank’s obligation to purchase Eligible Bonds. If a court with jurisdiction to rule on the validity of the provisions described in 6.2(c)(ii) hereof shall enter a final, non-appealable judgment that any such provision is not valid and binding on SMUD, then the Purchase Period, the Available Commitment and the Bank’s obligation to purchase Eligible Bonds shall immediately terminate. If a court with jurisdiction to rule on the validity of the provisions described in 6.2(c)(ii) hereof shall enter a final, non-appealable judgment that such provisions are valid and binding on SMUD, the Bank’s obligation to purchase Eligible Bonds under this Agreement shall be automatically reinstated and the terms of this Agreement will continue in full force and effect (unless the obligation of the Bank to purchase Eligible Bonds hereunder shall otherwise have terminated or been suspended as provided in this Agreement). Notwithstanding the foregoing, if, upon the earlier of the expiration of the Purchase Period and the date which is one (1) year after the effective date of suspension of the Bank’s obligation pursuant to this Section 6.3(b), litigation is still pending and a judgment regarding the validity of the provisions described in Section 6.2(c)(ii) hereof that are the cause of such Suspension Event has not been obtained, then the Available Commitment, the Purchase Period and the obligation of the Bank to purchase Eligible Bonds shall at such time immediately terminate and thereafter the Bank shall be under no obligation to purchase Eligible Bonds.

(c) In the case of any Event of Default the Bank may give written notice in the form of Exhibit B of such Event of Default to SMUD (a “*Termination Notice*”), the Trustee and Remarketing Agent stating that an Event of Default has occurred hereunder and directing that the Bonds be called for mandatory tender pursuant to Section 84.02 of the Supplemental Resolution (a “*Default Tender*”) or take such other remedial action as is provided for in the Bond Resolution thereby causing the Bank’s obligations to purchase Eligible Bonds under this Agreement to terminate thirty (30) days after the Trustee’s receipt of such notice. The Available Commitment, the Purchase Period and the obligation of the Bank to purchase Eligible Bonds shall terminate on the thirtieth (30th) day described in the immediately preceding sentence, and, thereafter, the Bank shall be under no further obligation hereunder to purchase Eligible Bonds. The written notice provided by the Bank under this paragraph (c) shall constitute notice of termination for purposes of the Bond Resolution.

(d) Upon the occurrence of any Event of Default as specified in any provision of this Article Six, the Bank may take any other action or remedies available to it under this Agreement, the Program Documents or otherwise pursuant to law or equity in order to enforce the rights of the Bank hereunder, under the Program Documents or otherwise. Following any such Event of Default, the Bank may, without limitation, take one or more of the following actions at any time and from time to time (regardless of whether the actions are taken at the same or different times): (i) by written notice to the Trustee and SMUD, declare the outstanding amount of the Obligations under this Agreement to be immediately due and payable without presentment, demand, protest or further notice of any kind, all of which are hereby expressly waived, and an action therefor shall immediately accrue (*provided* that the obligations of SMUD hereunder and under the Bank Bonds shall become immediately due and payable without such notice upon the occurrence of an Event of Default described in Section 6.2(a) or (b) above); (ii) either personally or by attorney or agent without bringing any action or proceeding, or by a receiver to be appointed by a court in any appropriate action or proceeding, take whatever action at law or in equity may appear necessary or desirable to collect the amounts due and payable under the Program Documents or to enforce performance or observance of any obligation, agreement or covenant of SMUD under the Program Documents, whether for specific performance of any agreement or covenant of SMUD, any other legal or equitable right vested in the Bank on behalf of the Bank by this Agreement or any other Program Document or by law or in aid of the execution of any power granted to the Bank in the Program Documents; (iii) at the expense of SMUD, cure any Default, Event of Default or event of nonperformance hereunder or under any Program Document; *provided, however*, that the Bank shall have no obligation to effect such a cure; and (iv) exercise, or cause to be exercised, any and all remedies as it may have under the Program Documents and as otherwise available at law and at equity.

(e) The remedies provided in this Section 6.3 shall only be exclusive with respect to Events of Default to the extent described in this Section 6.3 and to the extent they are obtained by the Bank. If, for any reason whatsoever, the Bank is not able to obtain all such remedies, then the Bank hereby reserves the right and shall have the right to pursue any other available remedies, whether provided by law, equity, or any Program Document. The provisions of this Agreement shall be a contract with each and every Bank Bondholder and the duties of SMUD shall be enforceable by any Bank Bondholder by mandamus or other appropriate suit, action, or proceeding in any court of competent jurisdiction.

Section 6.4. Solely for the Benefit of Bank. The rights and remedies of the Bank specified herein are for the sole and exclusive benefit, use and protection of the Bank, and the Bank is entitled, but shall have no duty or obligation to SMUD, the Trustee or any other Person or otherwise, to exercise or to refrain from exercising any right or remedy reserved to the Bank hereunder or under any of the other Program Documents.

Section 6.5. Discontinuance of Proceedings. In case the Bank shall proceed to invoke any right, remedy or recourse permitted hereunder or under the Program Documents and shall thereafter elect to discontinue or abandon the same for any reason, the Bank shall have the unqualified right so to do and, in such event, the and the Bank shall be restored to their former positions with respect to the Obligations, the Program Documents and otherwise, and the rights, remedies, recourse and powers of the Bank hereunder shall continue as if the same had never been invoked.

ARTICLE SEVEN

MISCELLANEOUS

Section 7.1. Amendments, Waivers, Etc. No amendment or waiver of any provision of this Agreement, or consent to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties hereto, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

Section 7.2. Notices. All notices and other communications provided for hereunder shall be in writing (including required copies) and sent by receipted hand delivery (including Federal Express or other receipted courier service), facsimile or electronic mail transmission, or regular mail, as follows:

(a) if to SMUD: Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899
Attention: Treasurer
Telephone: (916) 732-6509
Telecopy: (916) 732-5835
Email: []

(b) if to the Bank: For all matters (including Notices of Bank Purchase):

TD Bank, N.A.
201 West High Street
1st Floor
Glassboro, NJ 08028
Attention: Gary Martz
Phone: (856) 404-3068
Email: Gary.Martz@td.com

With copies to:

Email: AMCBTDBankCorporateAdministration.Account@TD.com

TD Bank, N.A.
1 Vanderbilt Avenue
14th Floor
New York, New York 10017
Attention: Hristiana Simeonova
Email: Hristiana.Simeonova@td.com

TD Bank, N.A.
104 S. Main Street
Suite 601
Greenville, South Carolina 29601
Attention: Cathryn Kellogg
Phone: (864) 241-1558
Email: cathryn.kellogg@td.com

(c) if to the Trustee: U.S. Bank Trust Company, National Association
[]
Attention: []
Phone: []
Email: []

or, as to each Person named above, at such other address as shall be designated by such Person in a written notice to the parties hereto. All such notices and other communications shall, when delivered, sent by facsimile or electronic mail transmission or mailed, be effective when deposited with the courier, sent by facsimile or electronic mail transmission or mailed respectively, addressed as aforesaid, except that Notices of Bank Purchase submitted to the Bank shall not be effective until received by the Bank.

Section 7.3. Survival of Covenants; Successors and Assigns. (a) All covenants, agreements, representations, and warranties made herein and in the certificates delivered pursuant hereto shall survive the making of any advance hereunder and shall continue in full force and effect

until the Available Commitment shall have terminated and all of the Obligations hereunder shall have been paid in full. Whenever in this Agreement any of the parties hereto is referred to, such reference shall, subject to the last sentence of this Section, be deemed to include the successors and assigns of such party, and all covenants, promises and agreements by or on behalf of SMUD which are contained in this Agreement shall inure to the benefit of the successors and assigns of the Bank. SMUD may not transfer its rights or obligations under this Agreement without the prior written consent of the Bank. The Bank may transfer or assign some or all of its rights and obligations under this Agreement with the prior written consent of SMUD (which consent shall not be withheld unreasonably), *provided* that (i) with respect to the Bank's obligations under this Agreement only, SMUD has received written notice from the Rating Agencies then rating the Bonds that the transfer shall not cause the lowering, withdrawal or suspension of the ratings then existing on the Bonds, and (ii) the Bank shall be responsible for all costs resulting from the transfer. No assignment of this Agreement shall occur unless and until the provisions of the Supplemental Resolution providing for delivery of an Alternate Liquidity Facility for the Bonds are complied with, treating the assigned Agreement as an Alternate Liquidity Facility. The Bank agrees to provide SMUD written notice of all amounts due and owing the Bank through and including the date of any assignment pursuant to this Section 7.3. This Agreement is made solely for the benefit of SMUD and the Bank, and no other Person (including, without limitation, the Depository, the Dealer or any holder of Notes) shall have any right, benefit or interest under or because of the existence of this Agreement.

(b) Notwithstanding the foregoing, the Bank shall be permitted to grant to one or more financial institutions (each a "*Participant*") a participation or participations in all or any part of the Bank's rights and benefits and obligations under this Agreement on a participating basis but not as a party to this Agreement (a "*Participation*") without the consent of SMUD. In the event of any such grant by the Bank of a Participation to a Participant, the Bank shall remain responsible for the performance of its obligations hereunder, and SMUD shall continue to deal solely and directly with the Bank in connection with the Bank's rights and obligations under this Agreement. SMUD agrees that each Participant shall, to the extent of its Participation, be entitled to the benefits of this Agreement as if such Participant were the Bank, *provided* that no Participant shall have the right to declare, or to take actions in response to, an Event of Default under Section 6.1 or 6.2 hereof; *provided further* that SMUD's liability to any Participant shall not in any event exceed that liability which SMUD would owe to the Bank but for such participation.

Section 7.4. Unconditional Obligations. The obligations of SMUD under this Agreement and the Fee Agreement shall be primary, absolute, independent, unconditional and irrevocable and shall be performed strictly in accordance with the terms of this Agreement and the Fee Agreement, including without limitation the following circumstances:

(a) Any lack of validity or enforceability of the Program Documents or any other agreement or instrument relating to any of the above;

(b) Any amendment or waiver of, or any consent to or departure from, any provision of any of the Program Documents, except for any waiver or consent granted by the Bank;

(c) The existence of any claim, setoff, defense or other rights that SMUD may have at any time against the Bank or any other Person, whether in connection with this Agreement, the Program Documents or any unrelated transaction;

(d) Any breach of contract or other dispute between SMUD and any Bondholder, the Bank or any other Person;

(e) Any demand, statement or any other document presented hereunder proving to have been forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect whatsoever;

(f) Payment by the Bank hereunder against presentation of a draft or certificate which does not comply strictly with the terms of this Agreement; or

(h) The failure by the Bank to honor any Notice of Bank Purchase hereunder or to make any payment demanded hereunder on the grounds that the demand for such payment does not conform strictly to the terms and conditions of this Agreement.

Section 7.5. Liability of Bank; Indemnification. (a)(i) Except as provided in this Agreement, the Bank shall not be obligated to issue any further credits, to cure any defaults under any Program Document or otherwise, or in any other manner to extend any financial consideration or accommodation to SMUD.

(ii) The Bank shall not be deemed to have waived or released any of its rights or remedies (whether specified in or arising under this Agreement, the Fee Agreement or otherwise available to it by law or agreement) unless the Bank shall have signed a written waiver or release. Delay or failure to act on the Bank's part shall not constitute a waiver of or otherwise preclude enforcement of any of its rights and remedies. All of the Bank's rights and remedies shall be cumulative and may be exercised separately or concurrently. The Bank need not resort to any particular right or remedy before exercising or enforcing any other, and the Bank's resort to any right or remedy shall not preclude the exercise or enforcement of any other right or remedy.

(iii) SMUD assumes all risks of the acts or omissions of the Trustee, the Remarketing Agent, or any paying agent for the Bonds or Bank Bonds with respect to its use of this Agreement and the application of proceeds drawn hereunder; *provided* that this assumption with respect to the Bank is not intended to, and shall not, preclude SMUD's pursuing such rights and remedies as it may have against the Trustee, such transferee, the Remarketing Agent or any such paying agent at law or under any other agreement. Neither the Bank nor any of its officers, directors, employees or agents shall be liable or responsible for:

(A) The use that may be made of the Available Commitment or this Agreement;

(B) The form, validity, sufficiency, accuracy or genuineness of documents, or of any endorsements thereon, even if such documents should prove to be in any or all respects invalid, insufficient, inaccurate, fraudulent or forged, so long as the Bank was not

grossly negligent or guilty of willful misconduct as determined by a court of competent jurisdiction;

(C) Payment by the Bank against presentation of documents that do not comply strictly with the terms of this Agreement, including failure of any documents to bear any reference or adequate reference to this Agreement;

(D) The validity or sufficiency of any instrument transferring or assigning or purporting to transfer or assign this Agreement or the rights or benefits thereunder or proceeds thereof, in whole or in part, which may prove to be invalid or ineffective for any reason;

(E) Errors, omissions, interruptions or delays in transmission or delivery of any messages by telex, mail, cable, telegraph, facsimile or otherwise, whether or not they have been in cipher, including any Notices of Bank Purchase under this Agreement;

(F) Errors in interpretation of technical terms; or

(G) Any consequences arising from causes beyond the control of the Bank, including, without limitation, any Government Acts;

provided that, notwithstanding anything in the preceding clauses (A) through (G) to the contrary, SMUD shall have a claim against the Bank, and the Bank shall be liable to SMUD, to the extent, but only to the extent, of any direct, as opposed to consequential, damages suffered by SMUD that SMUD proves were caused by (A) the Bank's failure to pay under this Agreement after the presentation to it by the Trustee of a certificate strictly complying with the terms and conditions of this Agreement or (B) the Bank's willful or grossly negligent payment under this Agreement as determined by a court of competent jurisdiction in a final non-appealable judgment.

In furtherance and not in limitation of the foregoing, the Bank may accept documents that appear on their face to be in order, without responsibility for further investigation, regardless of any notice or information to the contrary.

(b) (i) To the maximum extent permitted by applicable law, SMUD agrees to indemnify, save and hold harmless each Bank-Related Person from and against: (A) any and all claims, demands, actions or causes of action that may at any time (including at any time following repayment of the Obligations) be asserted or imposed against any Bank-Related Person arising out of or relating to this Agreement, the Available Commitment, the Fee Agreement or any Program Document, the use or contemplated use of the proceeds of any advance by the Bank hereunder, or the relationship of SMUD and the Bank under this Agreement or any Program Document; (B) any investigative, administrative or judicial proceeding by any Governmental Authority arising out of or related to a claim, demand, action or cause of action described in subsection (A) above; and (C) any and all liabilities (including liabilities under indemnities), losses, costs or expenses (including attorney costs) that any Bank-Related Person suffers or incurs as a result of the assertion of any foregoing claim, demand, action, cause of action or proceeding, or as a result of the preparation of any defense in connection with any foregoing claim, demand, action, cause of action

or proceeding, in all cases, and whether or not a Bank-Related Person is a party to such claim, demand, action, cause of action or proceeding; *provided* that no Bank-Related Person shall be entitled to indemnification for any claim caused by its own gross negligence or willful misconduct. The agreements in this subsection shall survive the termination of this Agreement and repayment of all of the Obligations.

(ii) To the maximum extent permitted by applicable law, SMUD shall also indemnify and hold harmless the Bank from any transfer taxes, documentary taxes, assessments or charges made by any Governmental Authority by reason of the execution and delivery of this Agreement and the Program Documents or the making available of the Available Commitment. The agreements in this subsection shall survive the termination of this Agreement and repayment of all of the Obligations.

Section 7.6. Expenses. SMUD will promptly pay (i) the reasonable fees and expenses of counsel to the Bank incurred in connection with the preparation, execution and delivery of this Agreement and the other Program Documents, (ii) the reasonable out-of-pocket expenses of the Bank incurred in connection with the preparation, execution and delivery of this Agreement and the other Program Documents, (iii) the reasonable fees and disbursements of counsel to the Bank with respect to advising the Bank as to the rights and responsibilities under this Agreement after the occurrence of an Event of Default and (iv) all reasonable costs and expenses, if any, in connection with the administration and enforcement of this Agreement and the Program Documents and any other documents which may be delivered in connection herewith or therewith, including in each case the fees and disbursements of counsel to the Bank. In addition, SMUD agrees to pay, after the occurrence of an Event of Default, all reasonable costs and expenses (including attorneys' and consultants' fees and costs of settlement) incurred by the Bank in enforcing any obligations or in collecting any payments due from SMUD hereunder by reason of such Event of Default or in connection with any refinancing or restructuring of the credit arrangements provided under this Agreement in the nature of a "workout" or of any insolvency or bankruptcy proceedings. The obligations of SMUD under this Section 7.6 shall survive the termination of this Agreement.

Section 7.7. No Waiver; Conflict. No failure by the Bank to exercise, and no delay by the Bank in exercising any right, power or privilege hereunder, nor any course of dealing with respect to any of the same, shall operate as a waiver thereof, preclude any other or further exercise thereof nor shall a single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power, or privilege. The rights, remedies, powers and privileges herein provided and provided under each other Program Document are cumulative, and not exclusive of any rights, remedies, powers and privileges provided by law.

Section 7.8. Modification, Amendment, Waiver, Etc. No modification, amendment or waiver of any provision of this Agreement shall be effective unless the same shall be in writing and signed in accordance with Section 7.1 hereof.

Section 7.9. Dealing with SMUD. The Bank and its affiliates may accept deposits from, extend credit to and generally engage in any kind of banking, trust or other business with SMUD regardless of the capacity of the Bank hereunder.

Section 7.10. Severability. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or affecting the validity or enforceability of such provision in any other jurisdiction, and all other remaining provisions hereof will be construed to render them enforceable to the fullest extent permitted by law.

Section 7.11. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but when taken together shall constitute but one agreement and any of the parties hereto may execute this Agreement by signing any such counterpart. The parties agree that the electronic signature of a party to this Agreement shall be as valid as an original signature of such party and shall be effective to bind such party to this Agreement. The parties agree that any electronically signed document (including this Agreement) shall be deemed (i) to be “written” or “in writing,” (ii) to have been signed and (iii) to constitute a record established and maintained in the ordinary course of business and an original written record when printed from electronic files. Such paper copies or “printouts,” if introduced as evidence in any judicial, arbitral, mediation or administrative proceeding, will be admissible as between the parties to the same extent and under the same conditions as other original business records created and maintained in documentary form. Neither party shall contest the admissibility of true and accurate copies of electronically signed documents on the basis of the best evidence rule or as not satisfying the business records exception to the hearsay rule. For purposes hereof, “electronic signature” means a manually-signed original signature that is then transmitted by electronic means; “transmitted by electronic means” means sent in the form of a facsimile or sent via the internet as a “pdf” (portable document format) or other replicating image attached to an e-mail message; and, “electronically signed document” means a document transmitted by electronic means and containing, or to which there is affixed, an electronic signature.

Section 7.12. Table of Contents; Headings. The table of contents and the section and subsection headings used herein have been inserted for convenience of reference only and do not constitute matters to be considered in interpreting this Agreement.

SECTION 7.13. ENTIRE AGREEMENT. THIS AGREEMENT REPRESENTS THE FINAL AGREEMENT BETWEEN THE PARTIES HERETO WITH RESPECT TO THE SUBJECT MATTER HEREOF AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OF THE PARTIES HERETO AS TO SUCH SUBJECT MATTER.

Section 7.14. Governing Law. PURSUANT TO SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW (OR ANY SUCCESSOR STATUTE THERETO), THIS AGREEMENT AND THE FEE AGREEMENT SHALL BE DEEMED TO BE A CONTRACT UNDER, AND SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK AND APPLICABLE FEDERAL LAW; *PROVIDED, HOWEVER,* THAT THE CAPACITY, POWER AND AUTHORITY OF SMUD TO ENTER INTO THIS AGREEMENT AND THE OBLIGATIONS OF SMUD HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA AND APPLICABLE FEDERAL LAW WITHOUT REGARD TO CHOICE OF LAW RULES.

Section 7.15. Waiver of Jury Trial. (a) TO THE FULL EXTENT PERMITTED BY LAW, SMUD AND THE BANK EACH WAIVE THEIR RESPECTIVE RIGHTS TO A TRIAL BY JURY FOR ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF OR RELATED TO THIS AGREEMENT, THE FEE AGREEMENT, ANY OF THE OTHER PROGRAM DOCUMENTS, THE MASTER BOND RESOLUTION, THE BOND RESOLUTION OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. EACH OF SMUD AND THE BANK FURTHER AGREES THAT ANY SUCH CLAIM OR CAUSE OF ACTION SHALL BE TRIED BY A COURT TRIAL WITHOUT JURY. WITHOUT LIMITING THE FOREGOING, TO THE EXTENT PERMITTED BY LAW, THE PARTIES FURTHER AGREE THAT THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY IS WAIVED BY OPERATION OF THIS SECTION AS TO ANY ACTION, COUNTERCLAIM OR OTHER PROCEEDING WHICH SEEKS, IN WHOLE OR IN PART, TO CHALLENGE THE VALIDITY OR ENFORCEABILITY OF THIS AGREEMENT, THE FEE AGREEMENT, AND/OR ANY PROVISION HEREOF OR THEREOF. THIS WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT AND/OR THE FEE AGREEMENT.

(b) In the event the waiver of jury trial as set forth in subsection (a) of this Section shall be declared void or unenforceable, each of SMUD and the Bank agrees to refer the dispute to a judicial referee in accordance with the provisions of Section 638 *et seq.* of the California Code of Civil Procedure.

Section 7.16. Right of Setoff; Other Collateral. (a) Upon the occurrence and during the continuance of an Event of Default, the Bank is hereby authorized at any time and from time to time without notice to SMUD (any such notice being expressly waived by SMUD), and to the fullest extent permitted by law, to setoff, to exercise any banker's lien or any right of attachment and apply any and all balances, credits, deposits (general or special, time or demand, provisional or final), accounts or monies at any time held and other indebtedness at any time owing by the Bank to or for the account of SMUD (irrespective of the currency in which such accounts, monies or indebtedness may be denominated and the Bank is authorized to convert such accounts, monies and indebtedness into United States dollars) against any and all of the Obligations of SMUD, whether or not the Bank shall have made any demand for any amount owing to the Bank by SMUD; *provided, however,* that any such setoff, exercise of banker's lien or any right of attachment shall be limited to (i) balances, credits, deposits (general or special, time or demand, provisional or final), accounts or monies or (ii) indebtedness owed by the Bank to or for the account of SMUD, the proceeds of which would otherwise be available to pay or satisfy or otherwise secure the Bonds, the Obligations or any other indebtedness or obligations of SMUD secured or payable on a parity with or subordinate to the Lien on Net Subordinated Revenues securing the Bonds and the Bank Bonds; and *provided further, however,* that the exercise of any such setoff, banker's lien or right of attachment and the application of any such balances, credits, deposits, accounts, monies or proceeds of indebtedness that would constitute Revenues or other funds pledged pursuant to the Master Bond Resolution or Bond Resolution shall be subject to the terms, conditions and lien and payment priorities set forth in the Master Bond Resolution and the Bond Resolution.

(b) The rights of the Bank under this Section 7.16 are in addition to, in augmentation of, and, except as specifically provided in this Section 7.16, do not derogate from or impair, other rights and remedies (including, without limitation, other rights of setoff) which the Bank may have hereunder or under the other Program Documents.

Section 7.17. USA Patriot Act. The Bank hereby notifies SMUD that, pursuant to the requirements of the USA Patriot Act (Title III of Pub. L. 107 56 signed into law October 26, 2001) (the “*Patriot Act*”), it is required to obtain, verify and record information that identifies SMUD, which information includes the name and address of SMUD and other information that will allow the Bank to identify SMUD in accordance with applicable “know your customer” and anti-money-laundering rules and regulations, including, without limitation, the Patriot Act. SMUD hereby agrees that it shall promptly provide such information upon request by the Bank.

Section 7.18. Assignment to Federal Reserve Bank. The Bank and each other Bank Bondholder may assign and pledge all or any portion of the Obligations owing to it to any Federal Reserve Bank or the United States Treasury, including, without limitation, as collateral security pursuant to Regulation A of the Board of Governors of the Federal Reserve System and any Operating Circular issued by such Federal Reserve Bank or to any state or local governmental entity or with respect to public deposits; *provided* that any payment in respect of such assigned Obligations made by SMUD or on its behalf to the Bank in accordance with the terms of this Agreement shall satisfy SMUD’s Obligations hereunder in respect of such assigned Obligation to the extent of such payment. No such assignment shall release the Bank from its obligations hereunder.

Section 7.19. No Advisory or Fiduciary Relationship. In connection with all aspects of each transaction contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Program Document), SMUD acknowledges and agrees that: (a) (i) the services regarding this Agreement provided by the Bank and any Affiliate thereof are arm’s-length commercial transactions between SMUD, on the one hand, and the Bank and its Affiliates, on the other hand, (ii) SMUD has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate, and (iii) SMUD is capable of evaluating, and understands and accepts, the terms, risks and conditions of the transactions contemplated hereby and by the other Program Documents; (b) (i) the Bank and its Affiliates each is and has been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, has not been, is not, and will not be acting as an advisor, agent or fiduciary pursuant to Section 15B of the Securities Exchange Act of 1934 or otherwise, for SMUD or any other Person and (ii) neither the Bank nor any of its Affiliates has any obligation to SMUD with respect to the transactions contemplated hereby except those obligations expressly set forth herein and in the other Program Documents; and (c) the Bank and its Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of SMUD, and neither the Bank nor any of its Affiliates has any obligation to disclose any of such interests to SMUD. To the fullest extent permitted by Law, SMUD hereby waives and releases any claims that it may have against the Bank or any of its Affiliates with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transactions contemplated hereby.

Section 7.20. EMMA Postings. In the event SMUD files with EMMA, this Agreement, any Program Documents or any description of the material terms thereof or notice of any agreement to covenants, events of default, remedies, priority rights or other similar terms with respect thereto, either voluntarily or as required pursuant a continuing disclosure agreement or Rule 15c2-12 promulgated pursuant to the Securities and Exchange Act of 1934, as amended (the “*Rule*”) (each such posting, an “*EMMA Posting*”), SMUD shall (i) provide the Bank with a copy of each EMMA

Posting prior to submitting or posting on EMMA and (ii) shall not file or permit the filing of any EMMA Posting that includes Confidential Information. SMUD acknowledges and agrees that although the Bank may request or review edits or redactions of such materials prior to filing, the Bank is not responsible for SMUD's or any other entity's (including, but not limited to, any broker-dealer's) compliance or noncompliance (or any claims, losses or liabilities arising therefrom) with any continuing disclosure agreement or any applicable securities or other laws, including, but not limited to, those relating to the Rule.

Section 7.21. US QFC Stay Rules.

(a) *Recognition of U.S. Resolution Regimes.* In the event that any party that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of this Agreement (and any interest and obligation in or under this Agreement and any property securing this Agreement) from such Covered Entity will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement (and any such interest, obligation and property) were governed by the laws of the United States or a state of the United States. In the event that any party that is a Covered Entity or a BHC Act Affiliate of such party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights against such party with respect to this Agreement are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States. The requirements of this paragraph (a) apply notwithstanding the provisions of paragraph (b).

(b) *Limitation on the Exercise of Certain Rights Related to Affiliate Insolvency Proceedings.* Notwithstanding anything to the contrary in this Agreement or any related agreement, but subject to the requirements of paragraph (a), no party to this Agreement shall be permitted to exercise any Default Right against a party that is a Covered Entity with respect to this Agreement that is related, directly or indirectly, to a BHC Act Affiliate of such Covered Entity becoming subject to Insolvency Proceedings, except to the extent the exercise of such Default Right would be permitted under 12 C.F.R. § 252.84, 12 C.F.R. § 47.5, or 12 C.F.R. § 382.4, as applicable. After a BHC Act Affiliate of a party that is a Covered Entity has become subject to Insolvency Proceedings, any party that seeks to exercise a Default Right against such Covered Entity with respect to this Agreement shall have the burden of proof, by clear and convincing evidence, that the exercise of such Default Right is permitted hereunder.

“*BHC Act Affiliate*” of a party means an “affiliate” (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

“*Covered Entity*” means any of the following:

(a) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);

(b) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or

(c) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

“*Default Right*” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

“*Insolvency Proceeding*” means a receivership, insolvency, liquidation, resolution, or similar proceeding.

“*U.S. Special Resolution Regime*” means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

[Execution Pages Follow]

IN WITNESS WHEREOF, SMUD and the Bank have duly executed this Agreement as of the date first above written.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Name: Russell Mills
Title: Treasurer

Acknowledged and Agreed to by:

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION,
AS TRUSTEE

By: _____
Name: _____
Title: _____

TD BANK, N.A.

By: _____

Name: _____

Title: _____

EXHIBIT A

NOTICE OF BANK PURCHASE

TD Bank, N.A.
Gary.Martz@td.com
Hristiana.Simeonova@td.com
cathryn.kellogg@td.com

The undersigned, a duly authorized officer of U.S. Bank Trust Company, National Association, as trustee (the “Trustee”), hereby certifies to TD Bank, N.A. (the “Bank”), in accordance with the Standby Bond Purchase Agreement (the “Standby Agreement”), dated as of [_____] 1, 2023, between the Sacramento Municipal Utility District and the Bank, relating to the Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C (all capitalized terms herein having the meanings ascribed thereto in the Standby Agreement), that:

1. [Notice of tender of Eligible Bonds for purchase having a Purchase Price of \$ _____ has been received] [Eligible Bonds having a Purchase Price of \$ _____ have been called for mandatory purchase] pursuant to Section 84.02 of the Supplemental Resolution, of which \$ _____ constitutes principal and \$ _____ constitutes accrued interest.
2. Amounts available for the payment of the Purchase Price of such Eligible Bonds are \$ _____, of which \$ _____ is available to pay principal (which such amount includes amounts on deposit with the Trustee and Remarketing Agent to pay such Purchase Price) and of which \$ _____ is available to pay accrued interest.
3. The total principal amount requested hereby for the payment of the principal portion of the Purchase Price of Eligible Bonds is \$ _____, which amount does not exceed the related Available Principal Commitment or the principal amount referred to in Paragraph 1 above less the principal amount referred to in Paragraph 2 above.
4. The total amount requested hereby to pay the portion of the Purchase Price for Eligible Bonds constituting accrued interest is \$ _____, which amount does not exceed the Available Interest Commitment or the amount of interest referred to in Paragraph 1 above less the amount of interest referred to in Paragraph 2 above.
5. Eligible Bonds referred to above having a Purchase Price of \$ _____ [the amount in Paragraph 3 plus the amount in Paragraph 4] are hereby tendered to the Bank for purchase pursuant to the Standby Agreement on the date hereof.
6. Upon completion of purchase, the Trustee will [register such Bonds or, if a Bond for which notice of optional tender or mandatory purchase has been given is not delivered, a new Bond issued in replacement of the undelivered Bond, in the name of the

Bank or if directed in writing by the Bank its nominee or designee on the Bond Register] [cause the beneficial ownership of such Bonds to be credited to the account of the Bank or if directed in writing by the Bank its nominee or designee with the DTC], and will promptly hold such Bonds in trust for the benefit of the Bank or deliver such Bonds as the Bank may otherwise direct in writing, and prior to such delivery will hold such Bonds in trust for the benefit of the Bank.

7. The Purchase Date is _____.

8. The funds requested hereunder shall be transferred to the Trustee in accordance with the terms of the Standby Bond Purchase Agreement to the following account:

[ACCOUNT INFORMATION]

9. To the Trustee's knowledge, no Immediate Termination Event or Suspension Event has occurred and is occurring.

IN WITNESS WHEREOF, the Trustee has executed and delivered this Certificate as of the ____ day of _____, ____.

U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION, as Trustee

By _____
Name _____
Title _____

EXHIBIT B

FORM OF TERMINATION NOTICE

[Date]

U.S. Bank Trust Company, National Association

[_____]

Reference: [_____]

Attention: [_____]

Telephone: [_____]

Re: Sacramento Municipal Utility District
Subordinated Electric Revenue Refunding Bonds,
2023 Series C

Ladies and Gentlemen:

The undersigned, a duly authorized officer of TD Bank, N.A. (the "*Bank*") pursuant to Section 6.3(c) of the Standby Bond Purchase Agreement dated as of [_____] 1, 2023 (the "*Agreement*") between Sacramento Municipal Utility District and the Bank, relating to the Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C, hereby request you call all Eligible Bonds for mandatory tender pursuant to Section 84.02 of the Supplemental Resolution as described in Section 6.3(c) of the Agreement and notifies you that an Event of Default (as defined in the Agreement) pursuant to Section 6.1 or 6.2 of the Agreement has occurred and that as a result thereof the Agreement shall terminate on the date that is thirty (30) days after your receipt of this notice.

Sincerely,

TD BANK, N.A.

By: _____
Name: _____
Title: _____

cc: Sacramento Municipal Utility District

EXHIBIT C

FORM OF REQUEST FOR EXTENSION

REQUEST FOR EXTENSION

TD Bank, N.A.
Gary.Martz@td.com
Hristiana.Simeonova@td.com
cathryn.kellogg@td.com

Ladies and Gentlemen:

Reference is hereby made to that certain Standby Bond Purchase Agreement, dated as of [_____] 1, 2023 (the “*Agreement*”), between Sacramento Municipal Utility District (“*SMUD*”) and TD Bank, N.A. (the “*Bank*”), relating to the Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C. All capitalized terms contained herein which are not specifically defined shall be deemed to have the definition set forth in the Agreement. SMUD hereby requests, pursuant to Section 2.12 of the Agreement, that the Facility Maturity Date for the Agreement be extended by [**Identify Appropriate Period**]. Pursuant to Section 2.12 of the Agreement, we have enclosed along with this request the following information:

1. The outstanding principal amount of the Bonds;
2. The nature of any and all Defaults and Events of Default;
3. Confirmation that all representations and warranties of SMUD as set forth in Article Four of the Agreement are true and correct as though made on the date hereof and that no Event of Default has occurred and is continuing on the date hereof except as referenced in paragraph 2 above; and
4. Any other pertinent information previously requested by the Bank.

The Bank is requested to notify SMUD of its decision with respect to this request for extension within sixty (60) days of the date of receipt hereof. If the Bank fails to notify SMUD of its decision within such sixty (60) day period, the Bank shall be deemed to have rejected such request.

Very truly yours,

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____
Name: _____
Title: _____

EXHIBIT D

NOTICE OF EXTENSION

[Date]

U.S. Bank Trust Company, National Association

[_____]

Reference: [_____]

Attention: [_____]

Telephone: [_____]

Sacramento Municipal Utility District

6201 S Street

Sacramento, California 95817-1899

Attention: Treasurer

Telephone: (916) 732-6509

Re: Sacramento Municipal Utility District
Subordinated Electric Revenue Refunding Bonds,
2023 Series C

Ladies and Gentlemen:

Reference is hereby made to that certain Standby Bond Purchase Agreement, dated as of [_____] 1, 2023 (the “*Agreement*”), between Sacramento Municipal Utility District (“*SMUD*”) and TD Bank, N.A. (the “*Bank*”), relating to the Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C.

The undersigned, a duly authorized signatory of the Bank, hereby advises you, with reference to the above-referenced bonds (any capitalized term used herein and not defined shall have its respective meaning as set forth in the Agreement), that **[Complete as Appropriate]**:

1. On **[date]**, SMUD delivered to the Bank, pursuant to Section 2.12 of the Agreement, a Request for Extension requesting that the date referenced in the definition of “Facility Maturity Date” in the Agreement (as such date may have been extended previously from time to time) be extended to _____.

2. At the request and for the account of SMUD, we hereby extend the date referenced in the definition of “Facility Maturity Date” in the Agreement (as such date may have been extended previously from time to time) to _____.

3. Except as specifically provided in paragraph (1) above, all of the terms and conditions of the Agreement remain unchanged and in full force and effect.

4. **[This Notice of Extension is an integral part of the Agreement.]**

[The Facility Maturity Date will not be extended at this time.]

IN WITNESS WHEREOF, the undersigned, on behalf of the Bank, has executed and delivered this Notice of Extension as of the ____ day of _____.

Very truly yours,

TD BANK, N.A.

By: _____

Name: _____

Title: _____

Attachment L to Resolution No. 23-05-11

CHAPMAN DRAFT MAY 10, 2023

FEE AGREEMENT DATED [____], 2023

Reference is hereby made to the Standby Bond Purchase Agreement dated as of [____] 1, 2023 (as amended, restated, supplemented or otherwise modified from time to time in accordance with the terms thereof, the “*Agreement*”), between the SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district of the State of California (“*SMUD*”), and TD BANK, N.A. (the “*Bank*”), relating to the Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2023 Series C. Capitalized terms not otherwise defined herein have the meanings set forth in the Agreement.

The purpose of this Fee Agreement (this “*Fee Agreement*”) is to confirm the agreement between the Bank and SMUD with respect to, among other things, the Commitment Fee (as defined below) and certain other fees payable to the Bank. This Fee Agreement is the Fee Agreement referenced in the Agreement, and the terms hereof are incorporated by reference into the Agreement. This Fee Agreement and the Agreement are to be construed as one agreement between SMUD and the Bank, and all obligations hereunder are to be construed as obligations thereunder. All references to amounts due and payable under the Agreement will be deemed to include all amounts, fees and expenses payable under this Fee Agreement.

ARTICLE I. FEES AND OTHER AGREEMENTS.

Section 1.1. Commitment Fees. SMUD hereby agrees to pay to the Bank on [July 3], 2023, for the period commencing on the Closing Date and ending on [June 30], 2023, and in arrears on the first Business Day of each October, January, April and July occurring thereafter prior to the last day of the Purchase Period, and on the last day of the Purchase Period, a non-refundable commitment fee (the “*Commitment Fee*”) in an amount equal to the rate per annum (the “*Commitment Fee Rate*”) for the then applicable Rating (as defined below) specified in the applicable Level in the pricing grid below for each day during the related fee period on the Available Commitment from time to time in effect for each day during the related fee period:

LEVEL	MOODY’S RATING	S&P RATING	FITCH RATING	COMMITMENT FEE RATE
Level 1	Aa3 or above	AA- or above	AA- or above	0.25%
Level 2	A1	A+	A+	0.35%
Level 3	A2	A	A	0.45%
Level 4	A3	A-	A-	0.55%
Level 5	Baa1	BBB+	BBB+	0.70%
Level 6	Baa2 and below	BBB and below	BBB and below	2.70%

The term “*Rating*” as used herein means the long-term unenhanced debt rating assigned by Moody’s, Fitch and S&P to any Debt of SMUD secured by or payable from Net Subordinated Revenues on a parity with the Bonds or Parity Subordinated Debt. In the event of a split rating (*i.e.*, the Rating of one of the Rating Agencies is different than the Rating of any of the other

Rating Agencies), the Commitment Fee Rate shall be based upon the Level in which the lower of the two highest Ratings appears; *provided, however*, if less than three Rating Agencies then assign a long-term unenhanced debt rating to the Bonds and Parity Bonds or Parity Subordinated Debt, the Commitment Fee Rate shall be based upon the Level in which the lower Rating appears. Any change in the Commitment Fee Rate resulting from a change in a Rating shall be and become effective as of and on the date of the announcement of the change in such Rating. References to ratings levels above are references to rating categories as presently determined by the Rating Agencies and in the event of adoption of any new or changed rating system, including, without limitation, any recalibration or realignment of Rating in connection with the adoption of a “global” rating scale, the rating from the Rating Agency in question referred to above shall be deemed to refer to the rating category under the new rating system that most closely approximates the applicable rating category as currently in effect. In the event that a Rating is suspended or withdrawn (for the avoidance of doubt, a decision by SMUD to cause a Rating Agency to no longer maintain its Rating, for non-credit related reasons and not for the purpose of avoiding the occurrence of an event of default, shall not constitute a suspension or withdrawal of such Rating) by any Rating Agency or upon the occurrence of and during the continuance of an Event of Default, the Commitment Fee Rate shall increase to the Commitment Fee Rate specified for Level 6 above. The Commitment Fees shall be payable as set forth above, together with interest on the Commitment Fees from the date payment is due until payment in full at the Default Rate. The Commitment Fee shall be payable in immediately available funds and computed on the basis of a year of 360 days and the actual number of days to elapse. SMUD acknowledges that as of the Closing Date the Commitment Fee Rate is that specified above for Level 1.

Section 1.2. Amendment, Consent or Waiver Fee. SMUD agrees to pay to the Bank on the date of each amendment, supplement, or modification to the Agreement or this Fee Agreement (or any Program Document, the amendment, supplement or modification of which requires the consent of, or waiver from, the Bank), a non-refundable fee equal to \$2,500, or such other fee as may be agreed to between the Bank and SMUD after the Bank has provided SMUD with an estimate of such fee and SMUD has approved such fee estimate in writing plus the reasonable fees and expenses of any legal counsel retained by the Bank in connection therewith in an amount agreed to by the Bank and SMUD after the Bank has provided SMUD with an estimate of such fees and expenses of legal counsel and SMUD has approved such fee and expense estimate in writing.

Section 1.3. Purchase Demand Fees. SMUD agrees to pay or cause to be paid to the Bank a purchase demand fee (the “*Purchase Demand Fee*”) in the amount of \$250 with respect to each demand for the Bank to purchase Bonds pursuant to the Agreement. The Purchase Demand Fee shall be non-refundable once paid.

ARTICLE II. MISCELLANEOUS.

Section 2.1. Legal Fees. The Issuer shall pay the reasonable legal fees and expenses of the Bank incurred in connection with the preparation and negotiation of the Agreement, this Fee Agreement and certain other Related Documents in an amount not to exceed \$45,000 plus

disbursements. Legal fees shall be paid directly to the Bank's counsel, Chapman and Cutler LLP, in accordance with the instructions provided by Chapman and Cutler LLP.

Section 2.2. Amendments. No amendment to this Fee Agreement shall become effective without the prior written consent of SMUD and the Bank.

Section 2.3. Governing Law. THIS FEE AGREEMENT SHALL BE DEEMED TO BE A CONTRACT UNDER, AND SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF CALIFORNIA AND APPLICABLE FEDERAL LAW; *PROVIDED, HOWEVER,* THAT THE CAPACITY, POWER AND AUTHORITY OF THE BANK TO ENTER INTO THIS FEE AGREEMENT AND THE OBLIGATIONS OF THE BANK HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK AND APPLICABLE FEDERAL LAW WITHOUT REGARD TO CHOICE OF LAW RULES.

Section 2.4. Counterparts. This Fee Agreement may be executed in two or more counterparts, each of which shall constitute an original but both or all of which, when taken together, shall constitute but one instrument. Delivery of an executed counterpart of a signature page of this Fee Agreement by facsimile transmission or by e-mail with a pdf copy or other replicating image attached, will be effective as delivery of a manually executed counterpart of this Fee Agreement, and any printed or copied version of any signature page so delivered will have the same force and effect as an originally signed version of such signature page.

Section 2.5. Severability. Any provision of this Fee Agreement which is prohibited, unenforceable or not authorized in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition, unenforceability or non-authorization without invalidating the remaining provisions hereof or affecting the validity, enforceability or legality of such provision in any other jurisdiction.

Section 2.6. Representation by Legal Counsel; Joint Preparation. The parties hereto have participated jointly in the negotiation and drafting of this Fee Agreement, and each of the parties was represented by its respective legal counsel during the negotiation and execution of this Fee Agreement. In the event an ambiguity or question of intent or interpretation arises, this Fee Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Fee Agreement.

Section 2.7. No Disclosure. Unless required by law, SMUD shall not deliver or permit, authorize or consent to the delivery of this Fee Agreement to any Person (other than SMUD's attorneys, accountants or auditors) or for posting on the Electronic Municipal Market Access website as provided by the Municipal Securities Rulemaking Board unless the Bank provides its prior written consent. The Bank acknowledges and agrees, however, that this Fee Agreement was made available to the public for the meetings of the SMUD Board of Directors at which the SMUD Board of Directors considered the approval of the execution and delivery of this Fee Agreement.

Section 2.8. Payment Due on Non-Business Day to Be Made on Next Business Day. If any sum becomes payable pursuant to this Fee Agreement on a day which is not a Business Day, the date for payment thereof shall be extended, without penalty, to the next succeeding Business Day, and such extended time shall be included in the computation of interest and fees.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Fee Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first set forth above.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____

Name: Russell Mills

Title: Treasurer

TD BANK, N. A.

By: _____

Name: _____

Title: _____

SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE REFUNDING BONDS, 2023 SERIES C

REMARKETING AGREEMENT

[_____] , 2023

Honorable Board of Directors
Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899

Ladies and Gentlemen:

This is to confirm the agreement between the undersigned, Barclays Capital Inc. (the “Remarketing Agent”) and Sacramento Municipal Utility District, a municipal utility district of the State of California (the “District”), for the Remarketing Agent to act as exclusive remarketing agent in connection with the offering and sale from time to time in the secondary market of \$[PAR] aggregate principal amount of the Subordinated Electric Revenue Refunding Bonds, 2023 Series C (the “2023 Series C Bonds”) issued pursuant to the provisions of, and shall be payable as provided in, Resolution No. 85-11-1, adopted by the Board of Directors of the District on November 7, 1985 (the “Subordinate Master Resolution”), as amended and restated by Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001 (the “Amending Resolution”), and as supplemented by Resolution No. [_____] adopted by the Board of Directors of the District on [May 18, 2023] (the “Supplemental Resolution”). The Subordinate Master Resolution, as amended and restated, and supplemented is herein called the “Subordinate Resolution.” All capitalized terms used herein and not defined herein shall have the meanings specified in the Subordinate Resolution.

In addition, as used herein, “Rule G-34 Documents” shall mean: (i) the letter of credit agreement, reimbursement agreement, standby bond purchase agreement, loan agreement, guaranty agreement or any other document establishing an obligation to provide credit and/or liquidity support with respect to the 2023 Series C Bonds; (ii) the Subordinate Resolution, indenture, bond resolution, and any supplemental or series indenture(s) or resolution(s) or any other authorizing document under which the 2023 Series C Bonds were issued; (iii) any amendments, extensions, renewals, replacements or terminations thereof; and (iv) any other document related to the 2023 Series C Bonds required to comply with Municipal Securities Rulemaking Board (“MSRB”) Rule G-34(c), as it may be amended from time to time; and, in each case where required to be delivered, such delivery shall be by electronic means in a word-searchable PDF file (or in such other form as the Remarketing Agent shall notify the District in writing) labeled with the following information: (a) CUSIP number; (b) name of issuer; (c) name

of transaction; (d) name of document; and (e) whether the document is an execution version or a redacted version.

Concurrently with the execution and delivery of this Agreement, the District is entering into a Standby Bond Purchase Agreement dated as of [_____] (the “Initial Liquidity Facility”) with T.D. Bank, N.A., as liquidity provider (the “Bank”). The 2023 Series C Bonds will be as described in, and will bear interest in accordance with, the Subordinate Resolution.

1. Appointment of Remarketing Agent; Responsibilities of Remarketing Agent.

Subject to the terms and conditions herein contained, the Remarketing Agent is hereby appointed, and the Remarketing Agent hereby accepts such appointment and agrees to perform the duties and obligations imposed on it hereunder and under the Subordinate Resolution, as exclusive remarketing agent in connection with the determination of interest rates, the remarketing of tendered 2023 Series C Bonds from time to time in the secondary market subsequent to the initial offering, and the performance and discharge of all other responsibilities of the Remarketing Agent under the Subordinate Resolution. The principal office of the Remarketing Agent shall be as set forth under Section 12 hereof.

It is understood and agreed that the Remarketing Agent’s responsibilities hereunder and under the Subordinate Resolution will include (i) exercising its best efforts in its remarketing of the 2023 Series C Bonds without regard to the Bank Rate (as defined in the Initial Liquidity Facility), (ii) attempting to remarket 2023 Series C Bonds that have been tendered to U.S. Bank Trust Company, National Association, as trustee and paying agent under the Subordinate Resolution (the “Trustee”), at rates up to and including the maximum rate permitted under the bond documents before notifying the Trustee that a failed remarketing has occurred in respect of such tendered 2023 Series C Bonds, (iii) effecting and processing such purchases, (iv) billing and receiving payment of 2023 Series C Bond purchases, (v) causing the proceeds from the secondary sale of the 2023 Series C Bonds to be transferred to the Trustee, (vi) determining the Daily Rate, Weekly Rate, Flexible Rates, Term Rate, Direct Purchase Index Rate or Fixed Rate, as applicable, and (vii) performing such other related functions as provided in the Subordinate Resolution of the Remarketing Agent or reasonably requested by the District and agreed to by the Remarketing Agent.

The obligations of the Remarketing Agent hereunder and under the Subordinate Resolution, with respect to the date on which the 2023 Series C Bonds are to be remarketed pursuant to this Agreement, are also subject to the conditions set forth in Section 6 hereof. The Remarketing Agent may suspend remarketing 2023 Series C Bonds as provided in Section 7 hereof.

2. The 2023 Series C Bonds.

As more fully described in the Subordinate Resolution, the 2023 Series C Bonds will be issuable, subject to the terms and conditions of the Subordinate Resolution, in the form of fully registered 2023 Series C Bonds in the denominations, and having such tender, redemption, payment and other terms, as specified in the Subordinate Resolution.

3. Offering Materials.

The District represents that the Preliminary Official Statement relating to the 2023 Series C Bonds dated [____], 2023 (the “Preliminary Official Statement”), both at the date thereof and the date of the sale of the Bonds, except for the information in the Preliminary Official Statement with respect to the book-entry system of DTC and the Bank and under the captions or subcaptions “SPECIAL CONSIDERATIONS RELATING TO THE 2023C SUBORDINATED BONDS,” and “THE INITIAL LIQUIDITY FACILITY,” “Appendix B - Book-Entry-Only System,” and “Appendix G – Initial Liquidity Provider,” does not contain any untrue or misleading statement of a material fact or omit to state any material fact necessary to make such statements therein, in light of the circumstances under which they were made, not misleading. The District represents that the Official Statement relating to the 2023 Series C Bonds dated [____], 2023 (the “Official Statement”), both at the date thereof and the date of the Closing, except for the information in the Official Statement with respect to the book-entry system of DTC and the Bank and under the captions or subcaptions “SPECIAL CONSIDERATIONS RELATING TO THE 2023C SUBORDINATED BONDS,” and “THE INITIAL LIQUIDITY FACILITY,” “Appendix B - Book-Entry-Only System,” and “Appendix G – Initial Liquidity Provider,” does not contain any untrue or misleading statement of a material fact or omit to state any material fact necessary to make such statements therein, in light of the circumstances under which they were made, not misleading. The District agrees to pay the preparation costs of as many copies of the Preliminary Official Statement and the Official Statement as the Remarketing Agent may reasonably request, including all the Appendices thereto and information incorporated by reference therein and such other information associated with the District, the 2023 Series C Bonds and the security for the 2023 Series C Bonds as the Remarketing Agent shall reasonably request from time to time provided, however that no such material shall be finalized unless the Remarketing Agent and its counsel have had opportunity to review and comment upon the same. The District consents to the use and distribution of the Preliminary Official Statement and the Official Statement in connection with the remarketing of the 2023 Series C Bonds.

4. Representation, Warranties, Covenants and Agreements of the District.

The representations, warranties and agreements of the District set forth in the Contract of Purchase (the “Purchase Contract”) relating to the 2023 Series C Bonds, between the District and Barclays Capital Inc., in its capacity as Underwriter, are hereby incorporated herein as being made as of the date hereof. The District shall deliver to the Remarketing Agent in complying with its obligations under MSRB Rule G-34(c) such additional information concerning the business and financial condition of the District as the Remarketing Agent may reasonably request.

5. Certain Agreements of the District.

(a) During the term of this Agreement, the District agrees to promptly notify the Remarketing Agent by telephone (which shall be promptly confirmed in writing) of the occurrence of any of the events specified in Rule 15c2-12(b)(5)(C).

(b) During the term of this Agreement, the District agrees to promptly notify the Remarketing Agent by telephone (which shall be promptly confirmed in writing) of the occurrence of: (i) any event relating, which, with notice of the passage of time or both, would constitute an Event of Default under the Subordinate Resolution or the Initial Liquidity Facility; and (ii) any Event of Default under the Subordinate Resolution or the Initial Liquidity Facility.

(c) During the term of this Agreement, if, at any time, any event or condition known to the District relating to or affecting the District, the 2023 Series C Bonds, the security for the 2023 Series C Bonds, the Subordinate Resolution, the Initial Liquidity Facility, or the documents or transactions contemplated thereby, shall occur which, in the reasonable judgment of the District or the Remarketing Agent, might affect the accuracy, correctness or completeness of any statement of a material fact contained in the Official Statement, as it shall have been supplemented or amended from time to time pursuant to this Section, and result in the Official Statement, as so supplemented or amended, containing any untrue, incorrect or misleading statement of a material fact or omitting to state a material fact necessary in order to make the statements contained therein, in light of the circumstances under which they were made, not misleading, then: (i) the District (as to events or conditions relating to itself and otherwise of which it becomes aware) shall promptly notify the Remarketing Agent of the circumstances and details of such event; (ii) if, in the opinion of Remarketing Agent, such event or condition requires the preparation and publication of an amendment or supplement to the Official Statement, the District, at its expense, shall promptly prepare or cause to be prepared an appropriate amendment or supplement thereto, in a form and manner approved by the Remarketing Agent, so that the statements in the Official Statement, as so amended or supplemented, will not contain any untrue, incorrect or misleading statement of a material fact or omit to state a material fact necessary in order to make the statements contained therein, in light of the circumstances under which they were made, not misleading; and (iii) the District shall take all necessary action to approve such supplement or amendment.

(d) To assist the Remarketing Agent in complying with its obligations under MSRB Rule G-34(c), the District shall provide the following to the Remarketing Agent:

- i. Within three Business Days after the effective date of this Remarketing Agreement, a copy of each executed and currently effective Rule G-34 Document;
 - ii. no later than ten Business Days prior to the proposed date of any amendment, extension or renewal, replacement or termination of any of the then current Rule G-34 Documents, written notice that such document is proposed to be amended, extended, renewed, replaced or terminated, as the case may be, and the expected date of execution and delivery of such amendment, extension, renewal, replacement or termination, as the case may be;
 - iii. within three Business Days after the execution and delivery of any amendment, extension, renewal, replacement or termination, as the case may be, of any of the then current Rule G-34 Documents a copy thereof; and
 - iv. no later than three Business Days after receiving a request from the Remarketing Agent for any Rule G-34 Document, a copy thereof.
- (e) In each instance that Rule G-34 Documents are delivered to the Remarketing Agent pursuant to this Section 5, the District shall provide: (1) a clean final execution copy of each relevant document; or (2) in any such document where any redactions are made, a redacted final execution copy of each relevant document.
- (f) If the District determines that any information in the Rule G-34 Documents is confidential or proprietary, the District shall discuss such information and the potential redaction thereof with the Remarketing Agent and its counsel to ensure compliance with Rule G-34(c).
- (g) In the event that the District does not provide the Remarketing Agent with a copy of a document described in subsection (a) above, the Remarketing Agent may file a notice with the SHORT System that such document will not be provided at such times as specified by the MSRB and in the SHORT System Users Manual.
- (h) The District acknowledges and agrees that the Remarketing Agent will have no liability to the District with respect to: any confidential or proprietary information that is: (i) identified and/or redacted by the District in the Rule G-34 Documents; or (ii) made public when the Remarketing Agent files the Rule G-34 Documents with the SHORT System.
- (i) If there are any additional regulatory requirements, amendments or modifications to the securities laws with which the Remarketing Agent must comply relating to the Remarketing Agent's obligations under this Agreement, the District shall take all steps reasonably requested by the Remarketing Agent or its counsel necessary to comply with such additional requirements.
- (j) The District shall provide the Rule G-34 Documents to the Remarketing Agent at no cost to the Remarketing Agent.

6. Conditions to Remarketing Agent's Obligations.

The obligations of the Remarketing Agent under this Agreement have been undertaken in reliance upon, and shall be subject to, the due performance of the obligations and agreements hereunder to be performed by the District and to the accuracy of and compliance with the representations, warranties, covenants and agreements of the District contained herein, in each case on and as of the date of delivery of this Agreement and on and as of each date on which 2023 Series C Bonds are to be remarketed pursuant to this Agreement. The obligations of the Remarketing Agent hereunder with respect to each date on which 2023 Series C Bonds are subject to optional or mandatory tender are subject, in the discretion of the Remarketing Agent, to the following further conditions:

(a) (i) The Subordinate Resolution, the Initial Liquidity Facility and all other documents and agreements referenced in the Subordinate Resolution or the Official Statement shall be in full force and effect and shall not have been amended, modified or supplemented in any way which would materially and adversely affect the 2023 Series C Bonds, except as may have been agreed to in writing by the Remarketing Agent, (ii) there shall not have occurred an event of default or an event, which, with the passage of time or the giving of notice or both, would constitute an event of default under the Subordinate Resolution, the Initial Liquidity Facility; and (iii) there shall be in full force and effect additional resolutions, agreements, certificates and opinions which shall be reasonably satisfactory in form and substance to Bond Counsel.

(b) At or prior to the closing date (the "Closing Date") under the Purchase Contract, the Remarketing Agent shall have received or waived receipt of all closing documents required by, and delivered pursuant to, the Purchase Contract and all conditions precedent to the delivery of the 2023 Series C Bonds shall have been satisfied or waived.

7. Term, Removal, Termination and Resignation of Remarketing Agent; Suspension of Remarketing.

The Remarketing Agent may be removed by a written instrument of the District filed with the Remarketing Agent, the Bank, the Trustee and the Paying Agent (as these terms are used in the Subordinate Resolution) not less than 30 days before such removal is to take effect; *provided, however*, that such removal shall not take effect until the appointment and acceptance thereof of a successor remarketing agent. Following termination, the provisions of Sections 9, 10 and 11 will continue in effect as to transactions prior to the date of termination, and each party will pay the other any amounts owing at the time of termination. The Remarketing Agent may resign at any time upon thirty (30) days' written notice to the District, the Bank, the Trustee and the Paying Agent; *provided, however*, if the District has not appointed a successor remarketing agent by the end of said 30 day period, so long as the District continues to pay the Remarketing Agent, the Remarketing Agent's resignation shall not become effective for an additional 30

day period. Upon receipt of notice of resignation of the Remarketing Agent, the District will use its best efforts to appoint a successor acceptable to the Bank within 30 days of receipt of such notice of resignation.

The Remarketing Agent may suspend remarketing the 2023 Series C Bonds with immediate effect if it determines, in its reasonable judgment, that it is impracticable to attempt to remarket the 2023 Series C Bonds due to (i) a pending or proposed change in applicable tax laws, (ii) a general banking moratorium by Federal, New York or State authorities or a material disruption in commercial banking or securities settlement, payment services or clearance services shall have occurred, (iii) the occurrence or escalation of hostilities or other national or international calamity or crisis (including the escalation of an already existing national or international calamity or crisis), (iv) a downgrade or withdrawal of the short-term rating of the 2023 Series C Bonds below “A-1” or “F-1” by Standard & Poor’s Ratings Services or Fitch Ratings, respectively, (v) an imposition of material restrictions on the trading or transfer of the 2023 Series C Bonds, (vi) a suspension or material limitation in trading on the New York Stock Exchange or any other major national stock exchange, (vii) legislation shall be introduced by committee, by amendment or otherwise, in or be enacted by, the House of Representatives or the Senate of the Congress of the United States, or a decision by a court of the United States shall be rendered, or a stop order, ruling, regulation or official statement by, or on behalf of, the United States Securities and Exchange Commission or other governmental agency having jurisdiction of the subject matter shall be made or proposed, to the effect that the offering or sale of obligations of the general character of the Bonds, as contemplated hereby, is or would be in violation of any provision of the Securities Act of 1933, as amended and as then in effect or the Securities Exchange Act of 1934, as amended and as then in effect (the “Exchange Act”) or with the purpose or effect of otherwise prohibiting the offering or sale of obligations of the general character of the Bonds, as contemplated hereby, (viii) any of the representations and warranties of the District made hereunder shall not have been true and correct in all material respects on the date made, (ix) the District fails to observe any of the material covenants or agreements made herein, (x) a default or a moratorium in respect of payment of any U.S. Treasury bills, bonds or notes or a pending or proposed change in applicable tax laws the effect of which in the Remarketing Agent’s reasonable judgment makes it impractical to market Bonds or to enforce contracts for the sale of such 2023 Series C Bonds or (vii) a material misstatement or omission in the Official Statement as then modified or supplemented.

8. Dealing in 2023 Series C Bonds by Remarketing Agent.

The Remarketing Agent, in its individual capacity, either as principal or agent, at its option may (but is not obligated to) buy, sell, own, hold and deal in any of the 2023 Series C Bonds, and may join in any action which any owner of any 2023 Series C Bond may be entitled to take with the like effect as if it did not act in any capacity hereunder. Such purchases or sales are not required to be at par. The Remarketing Agent, in its individual capacity, either as principal or agent, may

also engage in or be interested in any financial or other transaction with the District and may act as depositary, trustee or agent for any committee or body of Bondholders or other obligations of the District as freely as if it did not act in any capacity hereunder. The Remarketing Agent may sell any 2023 Series C Bonds it has purchased to one or more affiliated investment vehicles for collective ownership or enter into derivative arrangements with affiliates or others.

9. Payment of Fees and Expenses.

While the 2023 Series C Bonds accrue interest at Flexible Rates, a Daily Rate or a Weekly Rate (as these terms are defined in the Subordinate Resolution), the District shall pay the Remarketing Agent directly, as compensation for its services hereunder, a fee equal to [_____ percent] ([__]%) per annum of the weighted average principal amount of the 2023 Series C Bonds outstanding during each three-month period, or such other amount as may be agreed upon from time to time by the District and the Remarketing Agent, payable quarterly in arrears on each February 1, May 1, August 1, and November 1, commencing [August 1], 2023. The Remarketing Agent will not be entitled to compensation for any period after conversion of the interest rate determination method for the 2023 Series C Bonds to a Term Rate Mode, Direct Purchase Index Rate Mode or a Fixed Rate Mode or following termination of this Agreement (whichever is earlier) except for a *pro rata* portion of the fee in respect of the quarter in which such conversion or termination occurs. The parties anticipate that separate fee arrangements will be made for the remarketing of 2023 Series C Bonds accruing interest at a Direct Purchase Index Rate, Term Rate or at a Fixed Rate.

10. Indemnity and Contribution.

(a) To the extent permitted by law, the District agrees to indemnify and hold harmless the Remarketing Agent and each person who controls the Remarketing Agent within the meaning of Section 15 of the Securities Act of 1933, from and against any and all losses, claims, damages or liabilities, caused by (i) the failure to register any security under the Securities Act of 1933, as amended, or to qualify any indenture under the Trust Indenture Act of 1939, as amended in connection with the remarketing of the 2023 Series C Bonds; or (ii) any untrue statement or alleged untrue statement of a material fact contained in the Official Statement or any amendment thereof or supplement thereto, or caused by the omission or alleged omission to state therein a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; except insofar as such losses, claims, damages or liabilities are caused by any such untrue statement or omission or alleged untrue statement or omission based upon information with respect to the book-entry system of DTC and the Bank and under the captions or subcaptions “SPECIAL CONSIDERATIONS RELATING TO THE 2023C SUBORDINATED BONDS,” and “THE INITIAL LIQUIDITY FACILITY,” “Appendix B – Book-Entry-Only System,” and “Appendix G – Initial Liquidity Provider,” or furnished under the heading

“Underwriting” as the case may be, in the Official Statement as amended or supplemented.

(b) In case any action shall be brought against the Remarketing Agent or any person controlling the Remarketing Agent, in respect of which indemnity may be sought against the District, the Remarketing Agent shall, as a condition to the above indemnity, promptly notify the District in writing, and the District shall assume the defense thereof, including the employment of counsel and payment of all expenses. The Remarketing Agent or any such controlling person shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the Remarketing Agent or controlling person, as the case may be, unless (i) the employment of such counsel has been specifically authorized by the District in writing prior to the employment of such counsel or (ii) the named parties to any such action (including any impleaded parties) including both the Remarketing Agent or such controlling person and the District, and the Remarketing Agent, or such controlling person, as the case may be, shall have been advised by such counsel that there may be one or more legal defenses available to it which are different from or additional to those available to the District and that joint representation may be inappropriate under professional standards, in which case the District shall not have the right to assume the defense of such action on behalf of the Remarketing Agent or such controlling person, as the case may be, it being understood, however, that the District shall not, in connection with any one such action or separate but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys for the Remarketing Agent (including controlling persons), and any such firm shall be designated in writing by the Remarketing Agent. The District shall not be liable for any settlement of any such action effected without its written consent, but if settled with the prior written consent of the District, or if there be a final judgment for the plaintiff in any such action, the District agrees to indemnify and hold harmless the Remarketing Agent and any such controlling person from and against any loss or liability by reason of such settlement or judgment.

(c) If the indemnification provided for in this Section 9 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a) above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the District on the one hand and the Remarketing Agent on the other from the remarketing of the 2023 Series C Bonds. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law or if the indemnified party failed to give the notice required under subsection (b) above, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the

relative fault of the District on the one hand and the Remarketing Agent on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the District on the one hand and the Remarketing Agent on the other shall be deemed to be in the same proportion as the total net proceeds from the remarketing (before deducting expenses) bear to the total commission received by the Remarketing Agent. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the District on the one hand or the Remarketing Agent on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The District and the Remarketing Agent agree that it would not be just and equitable if contribution pursuant to this subsection (c) were determined by *pro rata* allocation or by any other method of allocation which does not take account of the equitable considerations referred to above in this subsection (c). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (c) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (c), the Remarketing Agent shall be responsible for that portion represented by the percentage that the Remarketing Agent's commission with respect to such remarketing bears to the aggregate principal amount of such 2023 Series C Bonds and the District is responsible for the balance. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(d) The indemnity and contribution provisions of this Remarketing Agreement shall not supersede any other indemnity in any other agreement or arising otherwise by law.

11. Remarketing Agent's Liabilities.

The Remarketing Agent shall incur no liability to the District, or any other party for its actions as Remarketing Agent pursuant to the terms hereof and of the Subordinate Resolution except for its negligence or willful misconduct. The obligation of the Remarketing Agent to remarket bonds hereunder shall be on a best efforts basis without regard to the Bank Rate. The Remarketing Agent will not be liable to the District for the failure of any person to whom the Remarketing Agent has sold a 2023 Series C Bond to pay for such 2023 Series C Bond or to deliver any document in respect of the sale. It is understood and agreed that the Remarketing Agent shall not be obligated to advance its own funds to purchase, or to effect the purchase of any 2023 Series C Bonds.

12. Intention of Parties.

It is the express intention of the parties hereto that no purchase, sale or transfer of any 2023 Series C Bonds, as herein provided, shall constitute or be construed to be the extinguishment of any 2023 Series C Bond or the indebtedness represented thereby or the reissuance of any 2023 Series C Bond or the refunding of any indebtedness represented thereby.

13. No Advisory or Fiduciary Role.

The District acknowledges and agrees that: (i) the transaction contemplated by this Agreement is an arm's length, commercial transaction between the District and the Remarketing Agent in which the Remarketing Agent is acting solely as a principal and is not acting as a municipal advisor, financial advisor or fiduciary to the District; (ii) the Remarketing Agent has not assumed any advisory or fiduciary responsibility to the District with respect to the transaction contemplated hereby and the discussions, undertakings and procedures leading thereto (irrespective of whether the Remarketing Agent has provided other services or is currently providing other services to the District on other matters); (iii) the only obligations the Remarketing Agent has to the District with respect to the transaction contemplated hereby expressly are set forth in this Agreement; and (iv) the District has consulted its own legal, accounting, tax, financial and other advisors, as applicable, to the extent it has deemed appropriate.

14. Miscellaneous.

(a) Except as otherwise specifically provided in this Agreement, all notices and formal communications under this Agreement shall be in writing and mailed, telegraphed or delivered to:

The Remarketing Agent:

Barclays Capital Inc.
10250 Constellation Blvd, Suite 750
Los Angeles, California 90067
Attention: Christopher D. Roberts
TEL: (310) 481-4963
FAX: [() -]

The District:

Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899
Attention: Treasurer
TEL: (916) 732-6509
FAX: (916) 732-5835

The Remarketing Agent and District may, by notice given under this Agreement, designate other addresses to which subsequent notices, requests, reports or other communications shall be directed.

(b) The obligations of the respective parties hereto may not be assigned or delegated to any other person without the consent of the other parties hereto; provided, however, that the Remarketing Agent may assign its rights and obligations hereunder to an affiliate of the Remarketing Agent or to an entity succeeding to the business of the Remarketing Agent without the consent of the other parties hereto. This Agreement will inure to the benefit of and be binding upon the District and the Remarketing Agent and their respective successors and assigns, and will not confer any rights upon any other person, partnership, association or corporation other than persons, if any, controlling the Remarketing Agent within the meaning of the Securities Act.

(c) All of the representations, warranties and agreements contained in this Agreement of the District and the Remarketing Agent shall remain operative and in full force and effect, regardless of (i) any investigation made by or on behalf of the Remarketing Agent or the District, (ii) delivery of and any payment for any 2023 Series C Bonds hereunder or (iii) termination or cancellation of this Agreement.

(d) Section headings have been inserted in this Agreement as a matter of convenience of reference only, and it is agreed that such section headings are not a part this Agreement and will not be used in the interpretation of any provision of this Agreement.

(e) If any provisions of this Agreement shall be held or deemed to be or shall, in fact, be invalid, inoperative or unenforceable as applied in any particular case in any jurisdiction or jurisdictions, or in all jurisdictions because it conflicts with any provisions of any constitution, statute, rule of public policy, or any other reason, such circumstances shall not have the effect of rendering the provision in question invalid, inoperative or unenforceable in any other case or circumstances, or of rendering any other provisions inoperative or unenforceable to any extent whatsoever.

(f) This Agreement constitutes the entire agreement between the parties hereto with respect to the matters covered hereby, and supersedes all prior agreements and understandings between the parties.

(g) This Agreement shall only be amended, supplemented or modified in a writing signed by a duly authorized representative of the parties hereto.

(h) The Remarketing Agent may record telephone communications with the District, the Trustee, or the Paying Agent, or all of them.

(i) This Agreement shall not be deemed or construed to be modified, rescinded, canceled or waived, in whole or in part, except by a written instrument signed by a duly authorized representative of the parties hereto.

(j) Failure of any party to this Agreement to exercise any right or remedy hereunder in the event of a breach of this Agreement by any other party shall not constitute a waiver of any such right or remedy with respect to any subsequent breach.

(k) This Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which shall constitute one and the same document.

(l) The validity, interpretation and performance of this Agreement shall be governed by the laws of the State of California. Any action or proceeding to enforce or interpret this Agreement shall be brought, commenced or prosecuted in the County of Sacramento, California.

Very truly yours,

BARCLAYS CAPITAL INC.

By: _____

Name: Christopher D. Roberts

Title: Director

Accepted and agreed to as of the date first above written:

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _____

Name: Russell Mills

Title: Treasurer

[Signature page to 2023 Series C Remarketing Agreement]

Director Bui-Thompson left the meeting at 6:43 p.m.

President Sanborn then called for statements from the public regarding items not on the agenda, but no public comment was forthcoming.

President Sanborn then turned to Directors' Reports.

Director Rose reported on his participation in the annual Capitol-to-Capitol (Cap to Cap) trip to Washington, DC, with the Sacramento Metro Chamber.

Director Fishman reported on his participation in the Cap to Cap trip as well as his attendance at the Solar Car Race at Cosumnes River College and the graduation ceremony for the Sacramento Asian Pacific Chamber of Commerce's Catalyst Leadership Program. He concluded by reporting on his attendance at the Green & Gold Gala, which was the last one attended by Sac State President Nelsen prior to his retirement. "Stingers Up."

Vice President Herber reported on her participation in the Cap to Cap trip. She also noted her neighborhood association's 33rd Annual Home and Garden Tour and announced that the neighborhood association would host a Go Green Happy Hour at the Sierra 2 Center for the Arts and Community on May 24, 2023, at 5:30 p.m. She reported on her attendance at the Hispanic Chamber's Annual Salud! Business Awards at César Chávez Park as well as the Solar Cooker event held in Elk Grove. She concluded by reporting on her participation in a neighborhood walk in an underserved community where SMUD representatives go door-to-door and provide information on the clean power movement.

Director Kerth stated that it was wonderful that SMUD had broken ground on the Solano 4 Project, which will bring hundreds of megawatt hours of green power to Sacramento. He then reported on his attendance at the Shine Awards and his participation in the Cap to Cap trip. He reported he had spoken at the launch of a new pollinator garden at the Natomas Garden event as well as at the Sonrisa Downtown grand opening of affordable housing in downtown Sacramento. He then reported on his attendance at the Small Business Startup Forum and concluded by reporting on his attendance at the Sacramento Policy

and Sheriff's Memorial to honor those officers who have fallen in the line of duty in Sacramento County.

Director Tamayo reported that he did not attend the Cap to Cap trip because was instead participating in a Bee Biology field trip to southern Oregon. He stated he had been invited to participate in SMUD's workgroup on biodiversity and habitat conservation. He reported on his attendance at the Shine Awards. He stated he had reached out to several active groups in his ward including the Deerfield Mesa Grande Neighborhood Association, Mutual Housing of California, Friends of Colonial Heights Library, and the Oak Park Neighborhood Association. He stated that the City Church of Sacramento in Oak Park was providing a podcast on race culture and the church and noted they were very interested in how the 2030 Zero Carbon Plan relates to disadvantaged communities. He reported on his attendance at the Solar Regatta and the NorCal Design Build Competition held at Cosumnes River College. He concluded by announcing that the Colonial Heights Library would be lending out electric tricycles to promote learning on electric transportation.

President Sanborn congratulated Chief Operating Officer Frankie McDermott for being honored by the *Sacramento Business Journal* at their C-Suite Awards. She reported on her attendance at the California Chamber of Commerce 97th Annual Sacramento Host Breakfast as well as the Cap to Cap trip. She reported on her attendance at the Solano 4 Groundbreaking, and she thanked staff for coming out to participate in the Walk for Mental Health. She reminded everyone that it was Mental Health Awareness month. She concluded by reporting on her attendance at the United Way's Anniversary Gala as well as the Greater Sacramento Economic Council Annual Celebration.

Paul Lau, Chief Executive Officer and General Manager, reported on the following items:

- 1) **AAPI Month and Military Appreciation Month.** I would like to start tonight's report by recognizing May as both AAPI Month and Military Appreciation Month. AAPI Month honors the invaluable contributions of Asian Americans and Pacific

Islanders in our community. This month gives us an opportunity to learn about the unique cultures, history and achievements of the AAPI community. During Military Appreciation Month, we want to express our deepest gratitude to the brave men and women who have served, and continue to serve, our country. We are proud to have a long-standing tradition of supporting our armed forces and providing employment opportunities to veterans. We have been thrilled to be out in the community and with our partners celebrating these important observances. A big thank you to our Groups Reaching Across International Networks and Military Employee Resource Groups for the work they do to provide inclusive representation for our employees through offering support, networking opportunities and a sense of community within SMUD.

2) **Learning@SMUD**. This month, we are also in the middle of our three-week annual Learning@SMUD program! This year, we are offering employees more than 50 learning sessions, with a combination of in-person and hybrid events. Learning@SMUD covers a variety of topics organized by the five key pillars of SMUD's Enterprise Strategy. Employees can learn from peers, subject-matter experts, executives and this year's special keynote speaker, Desmond Lomax, a clinical mental health therapist and senior consultant at the Arbinger Institute. We also used feedback from employees to offer sessions on the topics they are most interested in learning more about. We were excited to bring back our in-person ride-along experiences where employees sign up for hands-on experiences in the field. Thank you and great work by all who made this year's lineup possible!

3) **STEM Education**. SMUD's been doing a lot of exciting youth STEM education lately! Our Community Education &

Technology Center (CE&TC) team partnered with the California Department of Water Resources and multiple nonprofits to host a field trip for students to the SMUD Museum of Science and Curiosity (MOSAC). This was the first in a quarterly series of field trips we are planning with students from underserved areas, giving them an opportunity to explore and learn about STEM education in a fun and engaging setting. We will prioritize Sustainable Community partners who work with local youth in neighborhoods based on our Resource Priorities Map, and reaching students who might not otherwise have a chance to visit the SMUD MOSAC. We held our 10th annual Solar Regatta, which was a great success! High school and college students from across our region raced their handcrafted boats across Rancho Seco Lake. Thanks to SMUD Board Members Nancy Bui-Thompson and Dave Tamayo for attending and our team of employees for creating a fun and engaging event for our next generation of clean energy leaders. Finally, local high school students gathered at Cosumnes River College to participate in SMUD's 16th Annual Solar Car Race. This year, 56 cars and over 115 students, representing nine Sacramento-area schools and organizations, competed by racing their own solar built cars.

- 4) **Awards.** As for awards, team SMUD continues to shine! Earlier today, our own Frankie McDermott was recognized as a 2023 Chief Operating Officer of the Year by the *Sacramento Business Journal!* As you know, Frankie is responsible for the safety, reliability and operations of the transmission and distribution systems, the delivery of energy to customers and the construction and maintenance of SMUD's grid. His responsibilities also include employee and public safety and operational efficiency. Congratulations, Frankie. We were glad

to be able to be there to celebrate with you earlier today. Lastly, I was honored to receive a new award that Clean Energy States Alliance created this year called the Clean Energy Champion. This award honors an individual who has made an impact on the expansion of clean energy. As always, I share this award with this Board of Directors who has so ambitiously committed to our climate goal and SMUD staff who are working hard to implement it. Truthfully, I am humbled every day by what we are accomplishing together.

5) **Board Video**. Tonight's video is about how SMUD is working with partners to create restorative spaces within our large solar projects. This pollinator project at Rancho Seco is a model for how to create clean energy and how to restore functioning ecosystems to benefit both agriculture and humanity.

President Sanborn requested the Summary of Board Direction, but there were no items.

No further business appearing, President Sanborn adjourned the meeting at 7:12 p.m.

Approved:

President

Secretary

Team Sequoia: Food Waste

Jessenia Chan, Neha Palani,
Maisha Ansari, Harshitha Sheshala



What is Food Waste?

- Food that is fit for consumption but **consciously** discarded at the retail or consumption phases



Effects of Food Waste

- Harmful chemical - methane
- 119 billion pounds in US/ yr
- 130 billion meals



Overall Concept/Planning Process

- Decided to focus on younger generation, and proper educating for better future decisions



Overall Concept



01
Create
Compost

Eco-Fair
02



03
Social
Media



Future of
Team
Sequoia
04



Creating Compost 01



Collecting organic Food Waste

- Folsom High School
 - Early March for a week
 - Over 62 pounds
- Malabar Indian Groceries
 - Over 30 pounds of organic waste
- 92 pounds in total





02 Eco-Fair



ECGFair Overview

- Educated elementary students
- 3 booths:
 1. Trivia and Presentation
 2. Art Activity
 3. Planting Activity

1



2

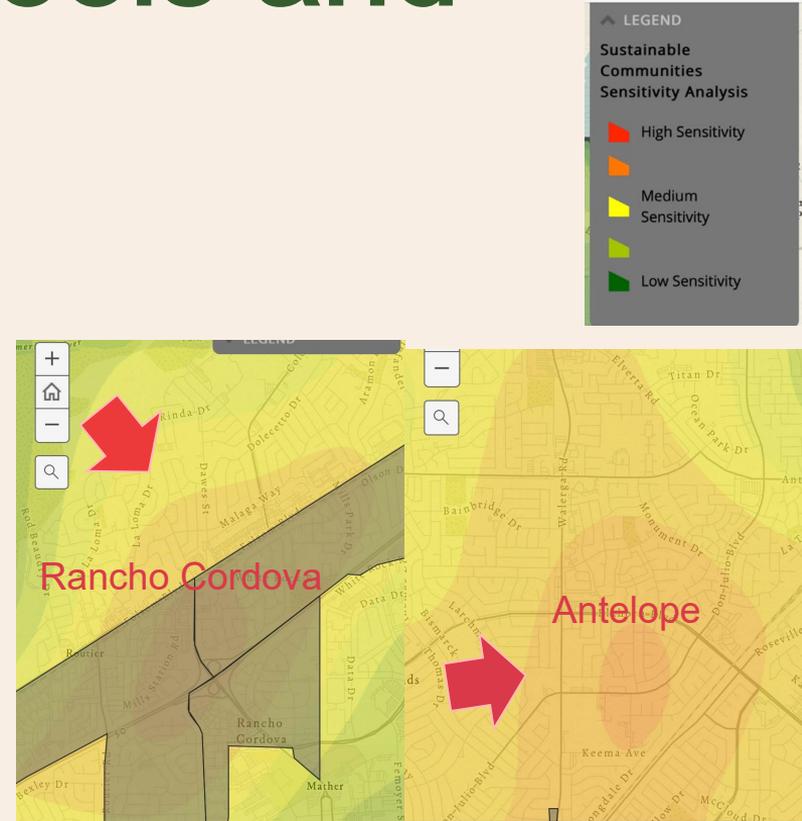


3



Underserved Schools and Areas

- SB 535 Disadvantaged Communities
 - investments aimed at improving California's most burdened communities
 - Rancho Cordova
 - Schools:
 - Riverview STEM Academy
 - Cordova Gardens
- Sacramento Poverty Area (high sensitivity)
 - Antelope
 - Schools:
 - Cyril Spinelli Elementary



Our Impact in Schools

698

Total Students Reached

4

Total Schools Reached



Riverview Stem Academy

156
Students
3 - 5th
graders



Gold Ridge Elementary



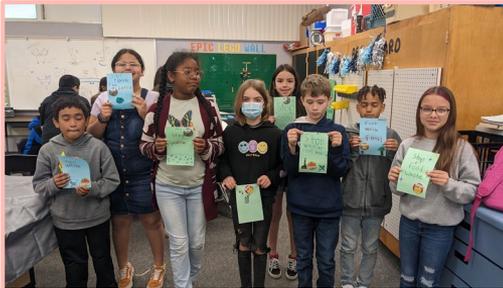
219 students
3-5th
graders

Cordova Garden Elementary



42 students

3 - 4 Graders



Cyril Spinelli Elementary



281 students

Kindergarten - 6th graders

Lunch-time activity:

- Assembly
- Planting activity
- Poster making activity

03

Social Media



Social Media

Youtube, Instagram, TikTok

Views:

Youtube: 3,846

Tiktok: 4,105

Total: 7,951 views

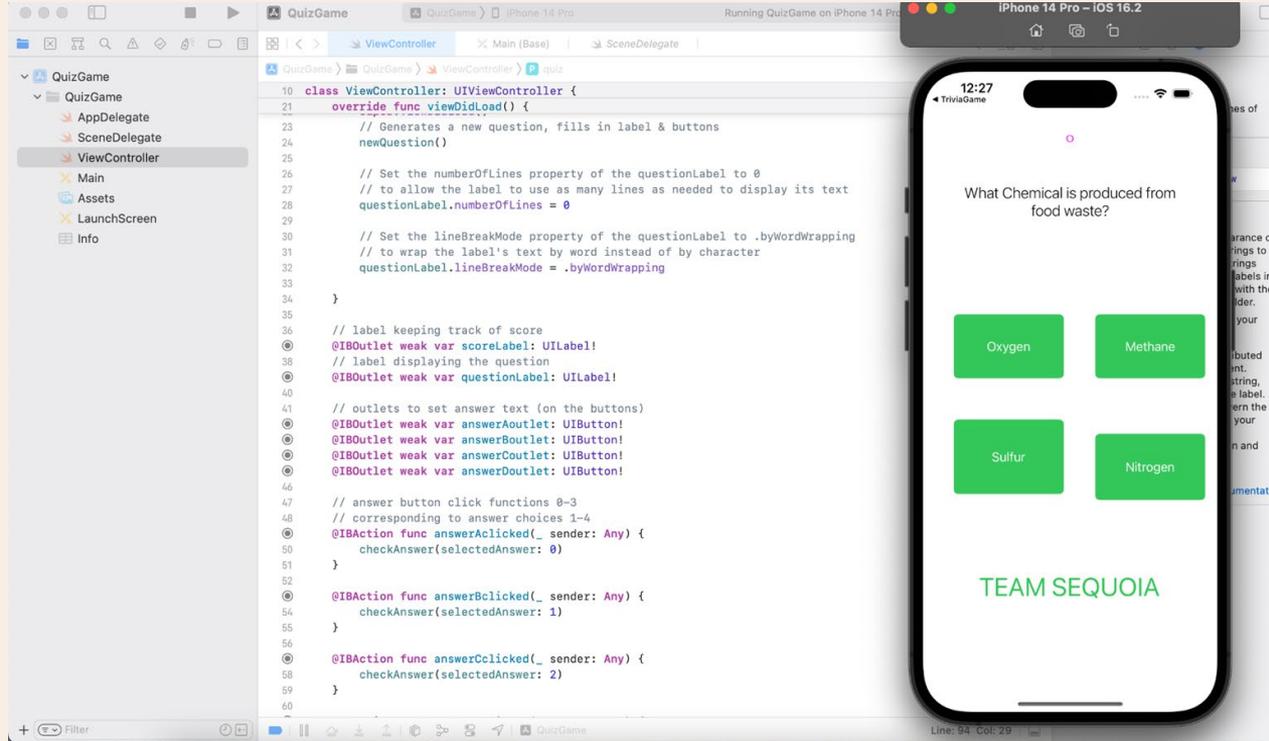
Likes:

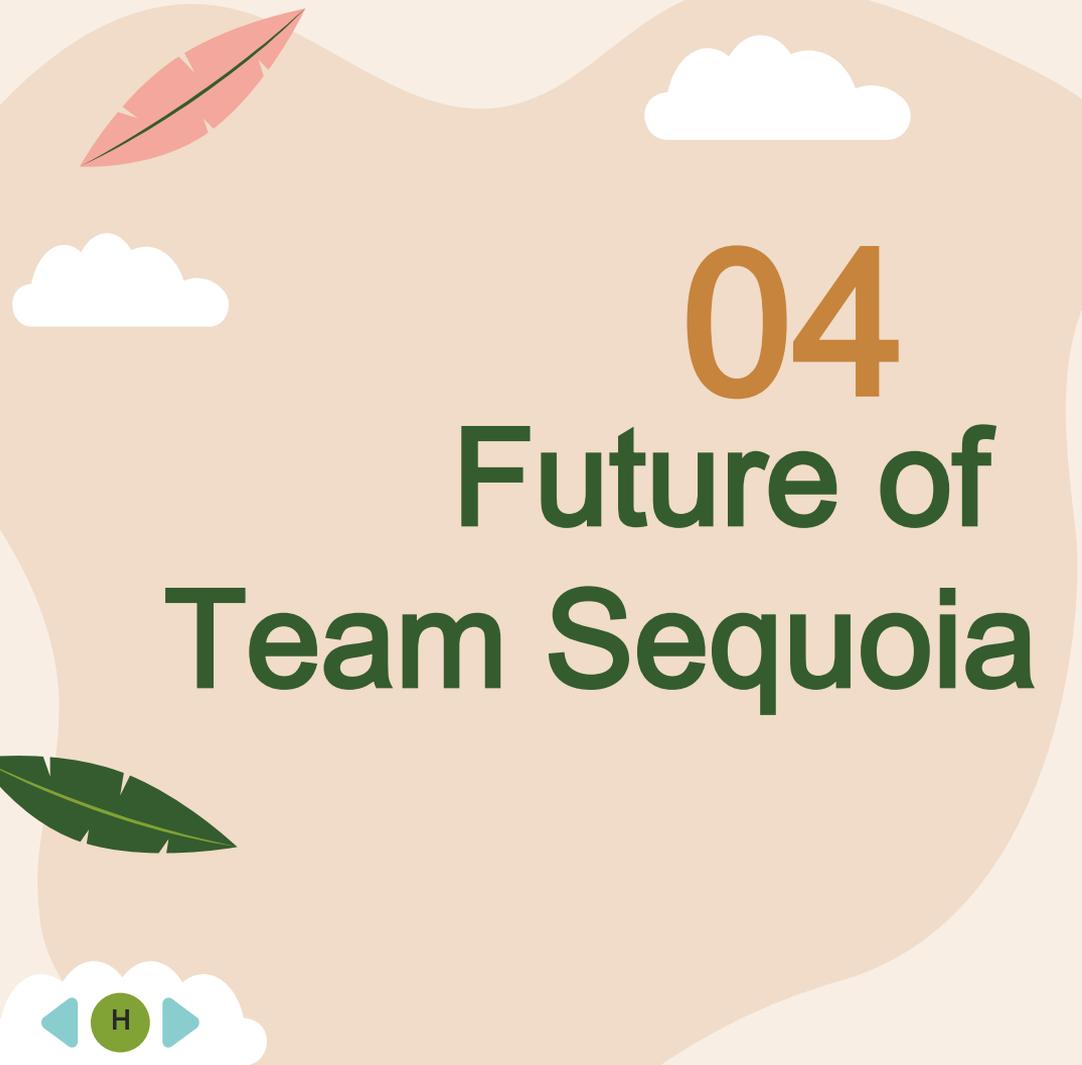
Youtube: 115

Tiktok: 320

Total: 435 likes

Development of Trivia App





04

Future of Team Sequoia



What did we learn?

Communicating
with officials

Time
Management





Impact + Future plans

- Spreading awareness to new generation
 - We are booked for Carl Sundahl
Fall 2023 Open House**
 - A non-profit
 - Expand for more volunteers
 - Host more eco-fairs
 - Teach underprivileged schools and students
- 

Reflection

- Different
 - Contacted schools sooner
 - Posted more on social media
- Varied from concept - time limit
 - No library activity
 - Kindergarten activity
- Worked well:
 - Eco-fair

“This is better than any field trip we’ve ever been to”

“Are you going to do this next year when I will be in 5th grade?”

- Riverview STEM Academy Students

Thank you!



From: [Katherine Valenzuela](#)
To: [Public Comment](#)
Cc: [Heidi Sanborn](#); [Brandon Rose-Contact](#); [Nancy Bui-Thompson](#); [Gregg Fishman](#); [Rob Kerth External](#); [Dave Tamayo](#); [Rosanna J. Herber](#)
Subject: [EXTERNAL] Carbon Capture and Storage Project at Sutter Energy Center - OPPOSE
Date: Wednesday, April 19, 2023 8:07:00 PM
Attachments: [SMUD Letter Oppose Calpine Project.pdf](#)

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello SMUD Board -

Please see attached for public comments on Calpine's proposed carbon capture and storage project at Sutter Energy Center. The Central Valley Air Quality Coalition, Sierra Club Sacramento, Center for Biological Diversity, ClimatePlan, Sacramento Environmental Justice Coalition, and San Francisco Bay Physicians for Social Responsibility oppose this proposed agreement. We anticipate that more groups will join this letter before your May board meeting, and will send an update before that meeting occurs. Feel free to reach out to me if you have any questions about our position.

Best,
Katie

Katie Valenzuela (she/her)
kbvale@gmail.com

Sacramento City Councilmember, District 4
Senior Policy Advocate, Central Valley Air Quality Coalition (CVAQ)



ClimatePlan



April 19, 2023

SMUD Board of Directors
6301 S Street
Sacramento, CA 95817
By email: PublicComment@smud.org

Re: Carbon Capture and Storage Project at Sutter Energy Center - OPPOSE

Dear SMUD Directors:

The undersigned individuals and organizations write to respectfully oppose the proposal for SMUD to partner with Calpine Corporation on a grant application, under which SMUD would purchase the output of a proposed Carbon Capture and Storage (CCS) project at the Sutter Energy Center.

We have major concerns about the proposed CCS project at Sutter. Not only have CCS projects worldwide failed to live up to their advertised benefits,¹ some of these projects have even resulted in *increased* greenhouse gas emissions as well as air and water pollution.² In light of the startling acceleration of these projects in the United States and here in California, many environmental and environmental justice advocates have been working on robust policy platforms that start with a key premise: CCS projects are very often poorly designed and can delay meaningful climate action, increase investments in fossil fuel infrastructure, and pose real potential risks to communities. Unfortunately, SMUD has not adequately shown that the proposal at issue would meaningfully differ from earlier projects that resulted in such problems.

¹ "Carbon capture remains a risky investment for achieving decarbonisation," September 2 2022: <https://ieefa.org/resources/carbon-capture-remains-risky-investment-achieving-decarbonisation>

² "Standord study casts doubt on carbon capture," October 25 2019: <https://news.stanford.edu/2019/10/25/study-casts-doubt-carbon-capture/>

After the SMUD Board approved a controversial plan to store 4 billion cubic feet of natural gas under a neighborhood in South Sacramento³ (which was eventually rejected by the California Public Utilities Commission), some of us were active in the conversations that led SMUD to create the Sustainable Communities Program.⁴ SMUD took proactive steps to address that harm and commit itself to being a better partner on environmental justice issues moving forward. Today SMUD is well known, here in California and across the nation, because of your low electricity rates, your deep commitment to sustainable communities, and your ambitious commitment to being zero carbon by 2030. We understand the challenge of reaching the last 10% of the zero carbon plan, but are excited by SMUD's efforts to identify the best strategies to do so and are ready to partner with SMUD to help make that vision a reality.

However, this project would not help SMUD reach your zero carbon goals, and may actually perpetuate harm to communities here and elsewhere in California:

- **There is absolutely no evidence to support Calpine's claim⁵ that this project will capture 95-98% of carbon emissions in the real world.** Evidence has shown that actual capture rates to be much lower than those advertised, and those rates can be canceled out completely by the energy needed to capture, transport, and store the carbon.⁶ There are also considerable concerns about the permanence of storage in underground geological formations - in other words, that some quantity of the carbon "stored" in those formations will leak out anyways, further undercutting the projected emissions captured by the project. Neither Calpine nor SMUD has offered any evidence that the capture rates at the Sutter project would, in fact, reach the advertised level, nor have they offered adequate assurance against sequestration leaks.
- **This project would likely have significant impacts on the surrounding community.** The Sutter Energy Center is located in a rural area, but it is not uninhabited; there are homes in that area⁷ as well as an unknown number of farmworkers employed in the surrounding fields. This is in addition to the approximately twenty workers on site,⁸ and six nearby school districts with an enrollment of approximately 13,000 students - 68% of which qualify for free or reduced price meals.⁹ This project is located within the Feather River Air Quality Management District, which is still working to attain National Ambient

³ "Controversial natural gas storage plan goes to PUC," July 4 2010:

<https://www.bizjournals.com/sacramento/stories/2010/07/05/story2.html>

⁴ SMUD Sustainable Communities Program: <https://www.smud.org/en/Corporate/Landing/Sustainable-Communities>

⁵ SMUD Board Presentation on Item 9, March 15 2023:

https://www.smud.org/-/media/Documents/Corporate/About-Us/Board-Meetings-and-Agendas/2023/Mar/2023-03-15_Exhibit-to-Agenda-Item-9.ashx

⁶ "Gas giant Chevron falls further behind on carbon capture targets for Gorgon gasfield," July 15 2022:

<https://www.theguardian.com/environment/2022/jul/16/gas-giant-chevron-falls-further-behind-on-carbon-capture-targets-for-gorgon-gasfield>

⁷ Sutter Power Project Final EIS April, 1999 page 4-6.

⁸ Calpine Sutter Power Project Final Environmental Impact Statement Vol 1, DOE 0294, April 1999, page 2-4

⁹ California Energy Commission memo from John Hesier, Project Manager regarding Calpine petition to amend Commission Decision, September 12, 2018 page 12:

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwihsqbbogL-AhWvIEQIHRBRCDEQFnoECA8QAQ&url=https%3A%2F%2Fwww.energy.ca.gov%2Ffilebrowser%2Fdownload%2F1215&usq=AOvYaw0UXebWqvEBWy7L8aJ_Nvba

Air Quality Standards.¹⁰ We have seen no analysis on the potential impacts this project will have on the region's ability to meet those national standards, nor have we seen any analysis on the impacts this projects could have on water quality, soil quality, air quality, light or noise levels, or other nuisances to the surrounding community. This facility already emits significant co-pollutants such as NOx¹¹ that will not be mitigated by the carbon capture project, and which will increase¹² as we expect this project to run close to 90% capacity (versus the 28% capacity factor it runs today) due to the nature of the tax credits that will help finance this project. Those potential impacts would most acutely be felt by those in the immediate area, but could also be felt by people miles away. Further, we have seen no documentation about any monitoring this project will deploy to ensure any unsafe levels of pollution or toxic contaminants are immediately identified and addressed, nor have we seen any financial assurances that would ensure long-term accountability for this project. In addition, neither Calpine nor SMUD has provided evidence to assure us that the carbon dioxide pipelines that will be necessary components of this project will not experience leaks or rupture, which cause asphyxiation or even death to people¹³ and wildlife¹⁴ even miles away.

- **California has yet to enact regulations to address the risks associated with CCS projects throughout their lifecycle.** Legislation passed last year¹⁵ directed the California Air Resources Board and the California Natural Resources Agency to implement a wide range of measures, including monitoring and minimizing co-pollutants, clarifying regulatory authority, long-term oversight measures, and more for CCS projects. That work is ongoing and not expected to finish for several months. To proceed with a project such as the Sutter CCS retrofit before it can be fully analyzed or budgeted with those protections in mind is premature, and could lead to further environmental or cost impacts down the line that would expose SMUD ratepayers to unknown risks.

Lastly, SMUD's claim that the CCS retrofit at Sutter is necessary to provide dispatchable generation to fill in the gaps is economically incorrect. The nature of IRA tax credits would mean a CCS-equipped Sutter plant would seek to operate around the clock -- closer to a baseload facility -- rather than filling in gaps, and would provide very little flexibility to either SMUD or the California Independent System Operator.

¹⁰ Feather River Air Quality Management District, Federal Air Quality Plans: <https://www.fraqmd.org/federal-air-quality-plans>

¹¹ Operation of the Calpine Sutter Energy Plant produces 92 tons per year of particulate matter less than ten microns, 204 tons per year of nitrous oxide, 483 tons per year of carbon monoxide, 24 tons per year of volatile organic compounds, and 31 tons per year of sulfur dioxide, all of which harm human health (Final Determination of Compliance for the Sutter Power Plant from FRAQMD, Nov. 12, 1998 Appendix F page 7

https://www.energy.gov/sites/default/files/2017/08/f35/EIS-0294-FEIS-1999_appendices%20F%20-%20I.pdf). The plant emissions can violate both the 24-hour and annual PM10 health standards (Calpine Sutter Power Project Final Environmental Impact Statement Vol 1, DOE 0294, April 1999 page 4-13

https://www.energy.gov/sites/default/files/2017/08/f35/EIS-0294-FEIS-1999_main%20volume.pdf).

¹² For example, Sutter currently emits an average 45 tons of NOx per year. At 90% capacity, that would lead Sutter to emit more than 140 tons of NOx per year.

¹³ "The Gassing of Satartia," August 26 2021:

https://www.huffpost.com/entry/gassing-satartia-mississippi-co2-pipeline_n_60ddea9fe4b0ddef8b0ddc8f

¹⁴ The Sutter plant currently utilizes a natural gas pipeline that runs through the Sutter National Wildlife Refuge, so given Calpine's claims that they will use existing right of ways for carbon transportation it is likely that the carbon pipeline will run along the same pathway - meaning a leak would also pose a significant risk to waterfowl.

¹⁵ SB 905 (Caballero, 2022): Carbon Sequestration: Carbon Capture, Removal, Utilization, and Storage Program: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB905

Beyond these technical points, SMUD's leadership in California carries implications beyond this proposed project. Your endorsement of the Sutter CCS retrofit sends the incorrect message that continuing to operate aging fossil fuel-fired electricity facilities, rather than replacing them with cheaper clean energy like wind and solar, is an appropriate solution to climate change. This will have unknown impacts on environmental justice communities elsewhere and our ambitious climate targets.

We urge SMUD to see the Sutter retrofit project as the dangerous delay tactic it is, one championed by the fossil fuel industry and other polluters who wish to continue business as usual while taking resources away from the needed transition to clean, cheaper renewable energy. Instead, there must be investment in an equitable transition to renewable solar and wind energy that upholds environmental justice and ends fossil fuels, leaving no worker or community behind. Supporting CCS operations at the Sutter plant or at any of SMUD's other generating facilities is simply the wrong way to go for our climate crisis and communities.

In sum, there are no upsides to moving forward with this partnership - only potential harm. Let's find a justice-centered path forward to a true zero emission future together.

Sincerely:

Katie Valenzuela
Senior Policy Advocate, Central Valley Air Quality Coalition (CVAQ)

Barbara Leary
Chairperson, Sierra Club Sacramento

Victoria Bogdan Tejeda
Staff Attorney, Climate Law Institute, Center for Biological Diversity

Nailah Pope-Harden
Executive Director, ClimatePlan

Herman Barahona
Lead Community Organizer, Sacramento Environmental Justice Coalition

Robert M. Gould, MD
President, San Francisco Bay Physicians for Social Responsibility

Attached: [2023 Carbon Capture, Use, and Storage \(CCUS\) Platform](#)



2023 Carbon Capture, Use, and Storage (CCUS) Platform

INTRODUCTION

Engineered carbon capture, use, and storage (CCUS) is being used to delay meaningful climate action and increases our investments in fossil fuel and other hydrocarbon infrastructure at a time when we should be investing in zero emission energy and phasing out fuels that continue to drive the climate crisis and poison frontline communities. So far, CCUS projects worldwide have failed to live up to promised climate benefits, and many have been net carbon emitters in a lifecycle analysis that considers upstream and downstream emissions. Further, engineered carbon capture can even increase air pollution, water pollution, and other harms for frontline communities. The risks of transporting and storing concentrated carbon dioxide include explosive releases of suffocating plumes that threaten immediate death and hospitalization, spoiling aquifers, degrading soil, and increasing seismicity. As we weigh the risks and benefits of technologies, we must implement a precautionary approach that prevents new harms, uses inherently safer systems and does not add to the cumulative pollution load.

We are part of a growing chorus of advocates and communities around the United States and across the globe condemning CCUS as an obstacle, not a vehicle, to a climate-safe planet, one that perpetuates fossil fuel dominance and exacerbates harms to frontline communities. While we urge policy makers to change course away from CCUS altogether and to pursue bolder, more justice-oriented direct emissions reductions, we feel simultaneously compelled to limit the harms and risks of CCUS to the communities we represent as long as CCUS remains on the table. In April 2022, the Central Valley Air Quality Coalition (CVAQ) circulated our first [Engineered Carbon Capture, Use, and Storage \(CCUS\) Policy Platform](#) collaboratively developed by San Joaquin Valley based environmental justice organizations as a response to interest in the region for initial CCUS projects and its capacity for carbon storage. Over the next few months, environmental health and justice groups across the state published a [Collective Environmental Justice Statement on Engineered Carbon Capture, Use, and Storage \(CCUS\) in California](#) along with several other documents communicating the various CCUS concerns and recommended pathways for decision makers.

The 2022 legislative session realized several of our platform's policy protections, principally the passing of CVAQ's sponsored bill SB 1314 (Limón) to prohibit the use of

captured carbon in enhanced oil recovery operations. Others include a moratorium on carbon pipelines, project transparency through a statewide public database, minimizing full project co-pollutant emissions to the extent technologically feasible, and a minimum 100 year oversight of long-term leak, emission, and seismic risks, among others. However, there are many additional protections and considerations needed to protect California communities from the harms and risks of CCUS.

Environmental justice groups across the state reconvened in the wake of SB 905, which, while providing some important policy protections, also initiated reforms to speed investment in CCUS. Given the clear and substantial evidence that CCUS has a track record of failure as a GHG reduction strategy and presents significant risk to the health and safety of Californians, especially already pollution-burdened communities, we urge any state agency overseeing the deployment of CCUS in California to use its discretion to reject project applications outright. Where state agencies are compelled to consider project applications, we urge that this list of common-sense policy protections necessary for CCUS be first met.

OVERALL

CCUS projects cannot proceed if they threaten groundwater and drinking water supplies or threaten to increase water pollution, soil pollution, truck or barge traffic, light pollution, noise pollution, or other nuisances to the community, defined as within a community designated radius from the project location. Any CCUS project cannot proceed if it threatens to negatively impact a source of drinking water by either degrading water quality or depleting surface water or groundwater supplies. Any CCUS project cannot proceed if it threatens to increase any local or regional criteria air pollutant or toxic air contaminant. Projects must include both baseline and fence-line monitoring for air pollution, and must have a pollution reduction plan to actually reduce local air pollution. All projects must demonstrate before construction and during the environmental analysis and review process that they will not increase pollution, and they must have a pollution reduction plan before the project proceeds.

CCUS infrastructure (e.g., capture infrastructure, pipelines, storage) should not be sited in or near overburdened EJ communities. We recommend a minimum buffer distance of 10 miles from all capture, storage, and pipelines, unless a further distance is shown by scientific modeling to be necessary to conform with the prohibition on pollution articulated in the previous point. Ruptures of pipelines carrying compressed carbon dioxide can lead to severe short- and long-term health impacts to surrounding communities. The 2020 pipeline rupture in Satartia, Mississippi, is a clear example of the dangers of living near carbon dioxide pipelines. Further, carbon dioxide from the Cameroon Lake Nyos incident suffocated 1,746 people up to 15 miles away. Carbon storage can threaten groundwater and drinking water sources for communities. Carbon storage sites should not be situated near any overburdened EJ community or a drinking water source of any overburdened EJ community. Carbon capture risks extending the life of polluting sources and exacerbating local pollution.

Carbon capture equipment should not be added to any facility near an overburdened EJ community.

CCUS projects must be powered by excess clean, renewable energy. Energy sources such as biomethane or hydrogen that aren't truly clean and renewable must not be allowed to power CCUS projects. Electrolytic hydrogen powered by wind and solar is clean and renewable, but it should be reserved for those rare circumstances where wind and solar with storage are not suitable to avoid the significant efficiency loss from using hydrogen. Relatedly, hydrogen should only ever be generated by electrolysis powered by clean, renewable energy, never from fossil fuels or biomethane. Additionally, CCUS should not be used as a mechanism to reduce potential hydrogen project CO2 emissions.

The state must require notification for any residents or schools within the set buffer distance near a planned site for any CCUS at least 6 months before a permit application. Notification must occur by direct mailing to owners and occupants. The agency or agencies coordinating the public process should connect with and compensate community based organizations to develop a comprehensive, transparent approach tailored to the community involved. Notification must be multilingual.

Once notification occurs, there must be at least 3 workshops or community meetings with the opportunity for residents to raise concerns with the project moving forward and require community benefits as a condition of the project proceeding. The public must be involved in the review of the project with workshops or community meetings at accessible times and locations, with interpretation services and translated materials provided, for residents to learn about the project, raise concerns, reject any project from moving forward, and require conditions providing community benefits before any project proceeds.

A full Environmental Impact Report (EIR) must be required for all proposed capture, transport, and storage projects. Each capture project, pipeline, and sequestration site must have its own EIR, and each EIR must also consider the upstream and downstream impacts from the project. An EIR cannot tier off of local EIRs for approval; it must be a specific, targeted review for each individual project. No CCUS project should receive a California Environmental Quality Act (CEQA) exemption.

The state must require research on potential adverse impacts, informed by impacted communities and community-based organizations, including worst-case scenario modeling, at local and statewide scales. Potential impacts should be studied at all stages, from capture and transportation to utilization and storage, and include impacts to air, water, soil, and public health.

Financial assurances should only be satisfied by measures that do not count on a company maintaining strong fiscal health for over a century, such as bonds and strong third-party insurance. Long-term accountability means that there must be financial guarantees to maintain CCUS projects for at least 100 years, but it is

impossible to predict if an individual company will remain solvent so far into the future. As a result, it is imperative that measures such as bonds and strong third-party insurance are used as mechanisms for financial guarantees, so that if an individual company goes out of business, there is still consistent financial responsibility for the ongoing maintenance of a project.

Financial assurances should be responsive to continuous reevaluation of costs of closure, remediation, and leaks or other harms. Unexpected costs could arise and should be planned for. Financial assurances must include a reasonable contingency cost allocation as well as a timeline for periodic reevaluations to see if additional assurances are required.

Within the California Air Resources Board (CARB), the Office of Community Air Protection (OCAP) or the Air Quality Planning and Science Division (AQPSD) should oversee carbon management work. These divisions are uniquely suited to manage CCUS projects because of their expertise in air quality science, and one of them should oversee CCUS projects to ensure that no individual project threatens to worsen air quality or increase air pollution, to ensure that projects have realistic pollution reduction plans in place, and to shut down any projects that fail to follow their pollution reduction plans or otherwise end up worsening air quality in practice. The office that oversees these projects should be adequately resourced to conduct field audits, and should have an established protocol for how to address any credits generated or compliance gained from projects that are deemed ineligible due to lack of compliance with the protocols established.

CCUS financing must not result in increased rates for utility customers. The additional cost of constructing and maintaining CCUS infrastructure should not have the unintended consequence of raising rates for utility customers, and any project that moves forward must come with legally-binding guarantees that financing will not come from increased rates.

CARB must amend the CCUS Protocol in the Low Carbon Fuel Standard (LCFS) to include all protections and must place a moratorium on LCFS applications for CCUS projects until in place. It is not enough for CARB to protect communities in California, but rather CARB must also ensure that its programs do not exacerbate local harms in other states. Since the LCFS crosses state lines, it must be brought into alignment with in-state protections, including the prohibition on the use of captured carbon for enhanced oil recovery provided by SB 1314 (Limón) and SB 905 (Caballero). However, the LCFS is not sufficient to protect communities because many CCUS projects will not be eligible for LCFS and because LCFS is an insufficient enforcement mechanism, particularly given the abundant federal funding available. Thus, while the LCFS must offer all of the protections in this platform, as well as the protections offered by other relevant laws, including these protections in the LCFS is not sufficient. Further, the LCFS must not incentivize projects to proceed without these protections, so CARB must pause the LCFS CCS Protocol, which currently lacks sufficient community protections.

CARB must include a multi-criteria lifecycle assessment in the LCFS CCS Protocol, and that multi-criteria lifecycle assessment must include construction, transport, and power generation. Assumptions about power generation must reflect actual plans and accurately reflect intentions to connect to the grid. Further, CARB must verify its analysis with real world monitoring performed in-house, not by third party verifiers hired by companies with perverse incentives. That is, projects cannot be provided credits for promised or paper reductions in carbon intensity, only for actual, observed, and verified ones. A full life cycle assessment must include true alternatives including no build alternatives.

No offsets can be generated by planning, constructing, or operating CCUS projects. CCUS is profoundly untested as a climate strategy. Insofar as it has been applied, it has been a tremendous failure. Given the likelihood of projects to fail to provide climate benefits at all or at least to underdeliver significantly, they should not be incentivized through state market mechanisms like cap-and-trade or Low Carbon Fuel Standard. CARB should not adopt or amend any offset protocols that would allow for CCUS projects to generate credits that can be traded or bought.

CARB should take steps to ensure additionality with CCUS projects. A foundational premise of AB 32 is “additionality,” or the assurance that reductions are in addition to actions that would have otherwise been achieved. Another way to frame this question is to ensure that credits generated or compliance gained by CCUS projects should not count twice. CARB’s regulations should take care to ensure that additionality is achieved by building robust oversight to ensure that compliance entities aren’t double-counting “reductions” achieved by generating credits as well as compliance with other regulations.

CAPTURE

CARB should seriously consider omitting CCUS from its climate plans because it is a boondoggle with dubious climate impacts and grave local harms in even the best of circumstances. Insofar as CARB decides to allow and rely on CCUS, CARB must confine deployment to truly hard-to-decarbonize sectors in order to limit harm to climate and communities. Extending billions of dollars in taxpayer subsidies to infrastructure we need to phase out in the next 10-20 years would be a bad choice that would lock in emissions, preventing us from reaching our climate goals while also ensuring continued pollution in disadvantaged communities, exacerbating environmental injustice, limiting our ability to attain NAAQS, and harming public health. CARB must at all times consider the holistic impact of CCUS and not take a narrow mathematical view toward carbon accounting that over-relies on faulty assumptions and ignores connected issues like public health and environmental justice. As such, carbon capture should only be considered a candidate technology for truly hard-to-decarbonize sectors, and even in those sectors, CARB should prioritize other mitigation strategies.

Sectors that should never be candidates for CCUS, and thus for which CCUS should be prohibited in order to reach our climate and air quality goals, include:

Refineries

CARB's 2022 Scoping Plan relies heavily on deployment of CCUS on refineries despite significant concerns with feasibility. As Dr. Jennifer Wilcox, Principal Deputy Assistant Secretary in the Office of Fossil Energy and Carbon Management at U.S. DOE and CARB's keynote speaker said at the 2022 CCUS Symposium in Stockton, CCUS is "not a good idea for refineries" and "not the right solution" because "refineries are very complicated systems. They have many, many units that emit CO₂...not economic." Dr. Wilcox said that refinery CCUS only made economic sense on one refinery unit—the fluid catalytic cracker, which emits a more concentrated carbon dioxide stream, but concluded that adding CCUS to one unit only reduces a small fraction of refinery emissions: "one unit out of many doesn't help us with pollution at all of the other units." Furthermore, because oil refineries are old, complex, hundreds to thousands of acres, and space-constrained, other regulatory proceedings determined that widespread pollution control equipment installation would compromise maintenance and safety.

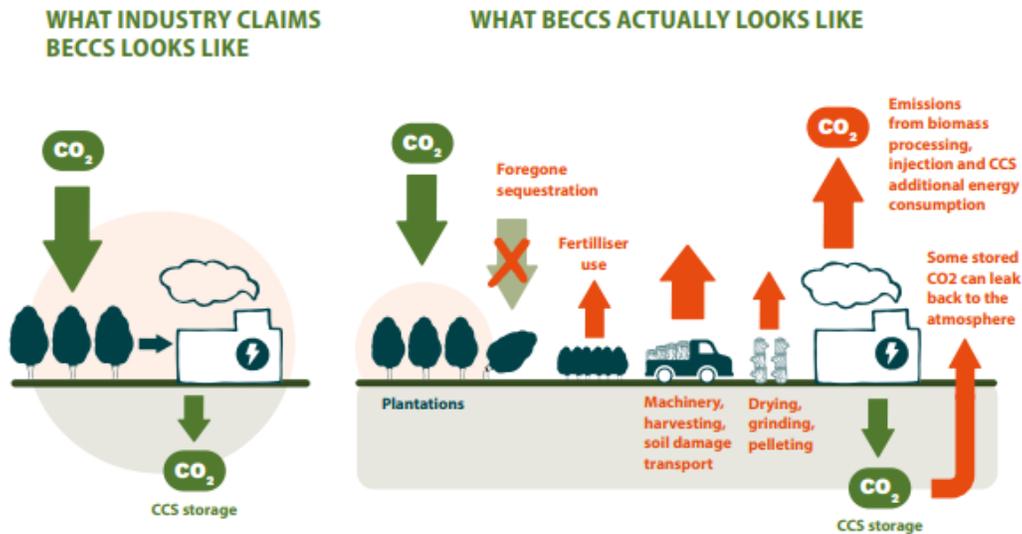
CARB must phase out fossil fuel infrastructure instead of funneling billions of public and private equity into it, investments which must be amortized over decades and thus require that infrastructure to remain for decades, if not longer. Thus, CARB must prohibit the use of CCUS on refineries. Refinery carbon capture is a climate dead end.

Natural gas power plants

As discussed above, CARB must not pour billions of taxpayer dollars into fossil fuel infrastructure that we must phase out to meet our climate targets. We simply need to stop burning natural gas for electricity, instead of wasting taxpayer money on massive new infrastructure projects to perpetuate the obsolete technology. Further, it would take decades to amortize billions of dollars in new public and private investment in gas power plants, even as we need to phase out the power plants in the short- to medium-term. If there is any sector that is relatively easy to decarbonize, it is the power sector, where we can rely on clean renewables like solar and wind with storage.

BECCS

Bioenergy with carbon capture and storage, or BECCS, must not be allowed for two reasons. First, it is bad for the climate, increasing emissions while purporting to do the opposite. On paper, turning biomass into energy and capturing the carbon produced may appear net negative, but only if unrealistic modeling assumptions are baked into the math. In other words, BECCS facilities will be net emitters of carbon in a life cycle analysis in the real world, and BECCS only makes sense if it is net negative, which it will never be in practice. This graphic illustrates the point well:



Second, to our knowledge, all of the planned BECCS facilities rely on refurbishing existing biomass plants that were shuttered because they were uneconomic. When active, and despite grand promises to improve air quality, these facilities ranked among the top point sources for particulate matter, causing severe local and regional pollution in EJ communities located in nonattainment zones. Even with these facilities shuttered, we are out of attainment for PM NAAQS. Indeed, the San Joaquin Valley Air District has never met any federal PM_{2.5} standard, and it is in severe nonattainment for even the original 1997 standard, despite multiple more stringent standards layered on top. Adding these new/old point sources will be disastrous for our regional air quality and even worse for the communities where the projects will be sited. Note also that, while open agricultural burning is fairly common in the Valley, it will be quickly phased out under new Air District rules, so the comparison of a biomass facility is not properly to open burning but to more sustainable biomass waste management processes.

Project proponents are once again making bold promises on air quality. We don't believe them, and, following the old adage "Fool me once, shame on you; fool me twice shame on me," it would be shameful for CARB to trust them a second time. Our mistrust is also backed up by sound science that remains skeptical that we can burn—or even gassify—a bunch of organic matter without causing significant local and regional pollution.

Instead, biomass should be sustainably mulched with attention to local externalities and returned to the soil, where it can improve soil health, reduce the need for fertilizers and pesticides, improve soil water retention, reduce irrigation demand, improve crop yields, and sequester carbon.

Waste incinerators and chemical recycling facilities

¹ https://www.fern.org/fileadmin/uploads/fern/Documents/2022/Six_problems_with_BECCS_-_2022.pdf

Burning garbage is a bad idea. It releases a host of air and water pollution. That remains true even when some of the carbon is captured. Also, even if some of the carbon would be captured, as with almost all CCUS projects worldwide, most of the carbon will be released in the real world, no matter what the modeling shows. Burning garbage releases carbon faster than other waste management practices, so it is worse for the climate. CARB must not pour billions of dollars of taxpayer money into a practice that is bad for the climate and terrible for local communities, and it must prohibit this harmful practice.

Chemical recycling is functionally the same, with a coat of greenwashing to help the poison go down, and the dubious benefit of also producing more plastic.

Ethanol production facilities

Ethanol is less a climate program than an inefficient farm subsidy, given that it has been shown to produce more carbon than gasoline. Adding CCUS would increase funding and drive ethanol production while only exacerbating climate harms by providing lucrative incentives to change land use toward domestic corn production and pushing cultivation of other domestic crops onto unused land, often in forested areas such as the Amazon Rainforest. Razing the rainforest to produce ethanol is not a coherent climate policy, and the land use implications of this application of CCUS are sufficient to demonstrate that this approach is a climate dead end. Further, ethanol facilities create significant local harms, comparable to oil and gas refineries. The only winners are corn and ethanol producers, with frontline communities and the world population losing.

STORAGE

The California Geological Survey must complete a study on maximum sequestration potential in the state before storage projects can be allowed to proceed. As part of this study, CGS must determine not just the available volume of our formations suitable for storage, but also the maximum amount that can be safely stored over time and the maximum safe storage rate. For any formations that will be used for carbon storage, CGS must find that the formations will store the carbon for at least 1,000 years. This study should be conducted statewide but broken down to individual fields and suitable subdivisions (e.g., for oil and gas formations, pools). Once that study is complete, the state can allow carbon storage to be deployed in a manner that prioritizes safety and equity, avoids siting near disadvantaged communities, minimizes risks of leakage and seismicity, and remains suitably distant from all sensitive receptors.

Storage project operators must assess and prove stable geology where projects are to be sited and ensure no risk of leakage, and they must prove that projects will not increase geological risks. Before projects can proceed, the State Geologist must certify that proposed projects are in geologically stable areas and that the proposed project will not increase seismicity.

CARB must ensure that any carbon stored underground will be permanently stored for at least 1,000 years. While SB 905 requires CARB to identify formations

capable of such permanent storage, the statute is curiously silent on requiring that only such formations be used for storage, and this loophole must be fixed by rule or new statute.

CARB must also ensure proper site characterization. Before being permitted to sequester carbon, an operator must properly characterize the storage site and demonstrate conclusively that the carbon will be stored where they say it will be stored. A mere assertion of expected behavior is insufficient. The Clean Energy Systems (CES) BECCS facility being planned for Mendota is a good illustration of this concern. In its permit application to the U.S. EPA, CES stated that the plume would move Northeast without providing evidence, let alone proof. Incidentally, many people reside to the Southwest, which, if the plume traveled in that direction, would presumably involve more property owners and thus more issues with property rights, as well as more potential opposition by community members who don't want millions of tons of a deadly asphyxiant stored under their homes. The state cannot rely on such opportunistic assertions.

Relatedly, CARB must require and verify monitoring of carbon storage to ensure that the carbon is behaving as expected underground. Plume monitoring must be extensive enough to ensure that carbon is not moving beyond where project operators have projected. If the plume does extend beyond the projected storage area, CARB must pause storage injections until appropriate storage rights are attained and all applicable laws are met for the new storage area, including new plume monitoring as needed.

For a sequestration project to proceed, the State Geologist must certify that the project is unlikely to harm groundwater supplies. Specifically, the Geologist must find that the project will not cause groundwater acidification from carbonic acid, that the project will not result in acids carrying heavy metals into groundwater, and that the project will not create enough pressure to force formation of saltwater into groundwater supplies.

TRANSPORTATION

The [Pipeline Safety Trust](#) (PST) provided helpful research on CO2 pipeline regulatory shortfalls in their report "Carbon Dioxide Pipelines: Dangerous and Under-Regulated". As PST points out, existing federal regulations do not allow for the safe transportation of CO2 via pipelines. California's current carbon pipeline regulations are just an incorporation of the federal regulations, so existing regulations are insufficient. Before pipelines can be deployed, the regulations must be improved, but in order for the regulations to be improved, more research must be conducted to fill knowledge gaps that in many cases underlie regulatory gaps. At a minimum, the state must do the following.

Keep the carbon pipeline moratorium in place until at a minimum updated federal regulations are in place. PHMSA research on the pipeline rupture in Satartia, MI won't be available for 2 years. California should not move ahead with its own rulemaking before there is federal guidance and more research available on pipeline risks and strategies. Additionally, the national conversation is likely to be very generative, with groups like PST more interested in engaging federally. Thus, the moratorium must remain in place until it automatically lifts at the conclusion of the PHMSA rulemaking.

There must be a defined safe distance or plume dispersion model for developing a potential impact area (PIR). We propose the previously stated minimum buffer zone distance be set around sensitive receptors like homes and schools through which carbon pipelines cannot run. This distance must be likely to prevent mass fatality events as well as to protect public health and safety more generally, especially given toxic impacts from non-fatal doses of carbon dioxide exposure.

An odorant must be added to CO₂ for effective leak detection. CO₂ is classified as a hazardous substance by workplace standards and under the California Hazardous Waste Control Law, yet it is hard to identify because it is odorless and colorless. Unlike the colorless, odorless gas methane, which is odorized for public safety, carbon dioxide remains odorless during transport, despite the dangers of carbon dioxide being far greater. Further, research has yet to identify an appropriate odorant for carbon dioxide. Until such an odorant is developed or identified, it would be highly irresponsible to proceed with hundreds or thousands of miles of new or repurposed pipelines.

Community burdens and resources should be considered during pipeline site exploration. Regulations governing siting decisions must consider access to emergency medical services, training of local first responders, and the compounding risks of existing sources of pollution. Emergency response and evacuation plans inclusive of nearby communities should be required to be in place before any project can proceed, and should be updated as needed.

Pipeline operators must assess and prove stable geology where projects are to be sited and ensure no risk of rupture due to seismicity. Before a pipeline can proceed, the State Geologist and the Office of the State Fire Marshal must certify that seismicity poses no significant safety risk for the pipeline.

A regulatory definition of "carbon dioxide" needs to assure all phases of CO₂ apply. Current definitions apply only to liquid and gaseous carbon dioxide, leaving a major loophole for supercritical carbon dioxide, which is not really a gas or a liquid and yet is the most likely form in which carbon dioxide will be transported. This loophole must be closed.

Converting existing transmission pipelines to CO₂ service presents serious risks that have not been fully investigated and must be prohibited. In the presence of water, carbon dioxide forms carbonic acid, which eats through steel. Existing oil and gas pipelines fail to account for this additional risk and are thus poor candidates to become

carbon pipelines. In addition to the pipes themselves, each pipeline contains numerous fittings, interchanges, and other additional sources of potential leaks and ruptures, each of which must be optimized for carbon pipelines instead of for oil and gas. Old pipelines built for different purposes present risks too grave and comprehensive to consider for transporting carbon dioxide.

Regulations must require pure carbon dioxide streams. Contaminants within CO₂ products being transported can jeopardize the integrity of the pipeline. Water and CO₂ create carbonic acid, which can break down the pipeline and lead to ruptures. Other contaminants, such as hydrogen sulfide, create additional health risks upon rupture and also corrode pipelines.

Other modes of transportation such as trucks, trains, and barges are not safe or cost effective and should not be utilized to transport CO₂. While the risks of pipeline transport are serious and demand very careful regulatory and enforcement regimes, given the economics and the risks, the state must prohibit the transportation of carbon dioxide by truck, rail, and barge altogether.

SIGNATORIES

The following organizations are aligned on the above and commit to uplifting these principles in their CCUS work:

Authors:

Asian Pacific Environmental Network
Central California Asthma Collaborative
Central California Environmental Justice Network
Center on Race, Poverty & The Environment
Central Valley Air Quality Coalition
Leadership Counsel for Justice and Accountability
Little Manila Rising
Physicians for Social Responsibility-Los Angeles

Endorsers:

Center for Biological Diversity

From: [Katherine Valenzuela](#)
To: [Public Comment](#)
Cc: [Heidi Sanborn](#); [Brandon Rose-Contact](#); [Nancy Bui-Thompson](#); [Gregg Fishman](#); [Rob Kerth External](#); [Dave Tamayo](#); [Rosanna J. Herber](#)
Subject: [EXTERNAL] Re: Carbon Capture and Storage Project at Sutter Energy Center - OPPOSE
Date: Wednesday, May 17, 2023 11:28:32 PM
Attachments: [SMUD Letter Oppose Calpine Project.pdf](#)

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello SMUD Board -

Please see attached for an updated letter regarding Calpine's proposed carbon capture and storage project at Sutter Energy Center. This letter is the same as our previous letter (as the public workshops and information provided have not changed our position), and includes new signatories: USC Environmental Student Assembly; 350 Humboldt; FracTracker Alliance; Center on Race, Poverty & the Environment; Glendale Environmental Coalition; Sunflower Alliance; Climate Health Now; Active San Gabriel Valley; and SoCal 350 Climate Action.

Feel free to reach out to me if you have any questions about our position.

Best,
Katie

Katie Valenzuela (she/her)
kbvale@gmail.com

Sacramento City Councilmember, District 4
Senior Policy Advocate, Central Valley Air Quality Coalition (CVAQ)

On Wed, Apr 19, 2023 at 8:04 PM Katherine Valenzuela <kbvale@gmail.com> wrote:

Hello SMUD Board -

Please see attached for public comments on Calpine's proposed carbon capture and storage project at Sutter Energy Center. The Central Valley Air Quality Coalition, Sierra Club Sacramento, Center for Biological Diversity, ClimatePlan, Sacramento Environmental Justice Coalition, and San Francisco Bay Physicians for Social Responsibility oppose this proposed agreement. We anticipate that more groups will join this letter before your May board meeting, and will send an update before that meeting occurs. Feel free to reach out to me if you have any questions about our position.

Best,
Katie

Katie Valenzuela (she/her)
kbvale@gmail.com

Sacramento City Councilmember, District 4

| Senior Policy Advocate, Central Valley Air Quality Coalition (CVAQ)



ClimatePlan



May 17, 2023

SMUD Board of Directors
6301 S Street
Sacramento, CA 95817

By email: PublicComment@smud.org

Re: Carbon Capture and Storage Project at Sutter Energy Center - OPPOSE

Dear SMUD Directors:

The undersigned individuals and organizations write to respectfully oppose the proposal for SMUD to partner with Calpine Corporation on a grant application, under which SMUD would purchase the output of a proposed Carbon Capture and Storage (CCS) project at the Sutter Energy Center.

We have major concerns about the proposed CCS project at Sutter. Not only have CCS projects worldwide failed to live up to their advertised benefits,¹ some of these projects have even resulted in *increased* greenhouse gas emissions as well as air and water pollution.² In light of the startling acceleration of these projects in the United States and here in California, many

¹ "Carbon capture remains a risky investment for achieving decarbonisation," September 2 2022: <https://ieefa.org/resources/carbon-capture-remains-risky-investment-achieving-decarbonisation>

² "Standord study casts doubt on carbon capture," October 25 2019: <https://news.stanford.edu/2019/10/25/study-casts-doubt-carbon-capture/>

environmental and environmental justice advocates have been working on robust policy platforms that start with a key premise: CCS projects are very often poorly designed and can delay meaningful climate action, increase investments in fossil fuel infrastructure, and pose real potential risks to communities. Unfortunately, SMUD has not adequately shown that the proposal at issue would meaningfully differ from earlier projects that resulted in such problems.

After the SMUD Board approved a controversial plan to store 4 billion cubic feet of natural gas under a neighborhood in South Sacramento³ (which was eventually rejected by the California Public Utilities Commission), some of us were active in the conversations that led SMUD to create the Sustainable Communities Program.⁴ SMUD took proactive steps to address that harm and commit itself to being a better partner on environmental justice issues moving forward. Today SMUD is well known, here in California and across the nation, because of your low electricity rates, your deep commitment to sustainable communities, and your ambitious commitment to being zero carbon by 2030. We understand the challenge of reaching the last 10% of the zero carbon plan, but are excited by SMUD's efforts to identify the best strategies to do so and are ready to partner with SMUD to help make that vision a reality.

However, this project would not help SMUD reach your zero carbon goals, and may actually perpetuate harm to communities here and elsewhere in California:

- **There is absolutely no evidence to support Calpine's claim⁵ that this project will capture 95-98% of carbon emissions in the real world.** Evidence has shown that actual capture rates to be much lower than those advertised, and those rates can be canceled out completely by the energy needed to capture, transport, and store the carbon.⁶ There are also considerable concerns about the permanence of storage in underground geological formations - in other words, that some quantity of the carbon "stored" in those formations will leak out anyways, further undercutting the projected emissions captured by the project. Neither Calpine nor SMUD has offered any evidence that the capture rates at the Sutter project would, in fact, reach the advertised level, nor have they offered adequate assurance against sequestration leaks.
- **This project would likely have significant impacts on the surrounding community.** The Sutter Energy Center is located in a rural area, but it is not uninhabited; there are homes in that area⁷ as well as an unknown number of farmworkers employed in the surrounding fields. This is in addition to the approximately twenty workers on site,⁸ and six nearby school districts with an enrollment of approximately 13,000 students - 68% of

³ "Controversial natural gas storage plan goes to PUC," July 4 2010:

<https://www.bizjournals.com/sacramento/stories/2010/07/05/story2.html>

⁴ SMUD Sustainable Communities Program: <https://www.smud.org/en/Corporate/Landing/Sustainable-Communities>

⁵ SMUD Board Presentation on Item 9, March 15 2023:

https://www.smud.org/-/media/Documents/Corporate/About-Us/Board-Meetings-and-Agendas/2023/Mar/2023-03-15_Exhibit-to-Agenda-Item-9.ashx

⁶ "Gas giant Chevron falls further behind on carbon capture targets for Gorgon gasfield," July 15 2022:

<https://www.theguardian.com/environment/2022/jul/16/gas-giant-chevron-falls-further-behind-on-carbon-capture-targets-for-gorgon-gasfield>

⁷ Sutter Power Project Final EIS April, 1999 page 4-6.

⁸ Calpine Sutter Power Project Final Environmental Impact Statement Vol 1, DOE 0294, April 1999, page 2-4

which qualify for free or reduced price meals.⁹ This project is located within the Feather River Air Quality Management District, which is still working to attain National Ambient Air Quality Standards.¹⁰ We have seen no analysis on the potential impacts this project will have on the region's ability to meet those national standards, nor have we seen any analysis on the impacts this projects could have on water quality, soil quality, air quality, light or noise levels, or other nuisances to the surrounding community. This facility already emits significant co-pollutants such as NOx¹¹ that will not be mitigated by the carbon capture project, and which will increase¹² as we expect this project to run close to 90% capacity (versus the 28% capacity factor it runs today) due to the nature of the tax credits that will help finance this project. Those potential impacts would most acutely be felt by those in the immediate area, but could also be felt by people miles away. Further, we have seen no documentation about any monitoring this project will deploy to ensure any unsafe levels of pollution or toxic contaminants are immediately identified and addressed, nor have we seen any financial assurances that would ensure long-term accountability for this project. In addition, neither Calpine nor SMUD has provided evidence to assure us that the carbon dioxide pipelines that will be necessary components of this project will not experience leaks or rupture, which cause asphyxiation or even death to people¹³ and wildlife¹⁴ even miles away.

- **California has yet to enact regulations to address the risks associated with CCS projects throughout their lifecycle.** Legislation passed last year¹⁵ directed the California Air Resources Board and the California Natural Resources Agency to implement a wide range of measures, including monitoring and minimizing co-pollutants, clarifying regulatory authority, long-term oversight measures, and more for CCS projects. That work is ongoing and not expected to finish for several months. To proceed with a project such as the Sutter CCS retrofit before it can be fully analyzed or budgeted with those protections in mind is premature, and could lead to further environmental or cost impacts down the line that would expose SMUD ratepayers to unknown risks.

⁹ California Energy Commission memo from John Hesier, Project Manager regarding Calpine petition to amend Commission Decision, September 12, 2018 page 12:

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKewihsgbboqL-AhWVIEQIHRBRCDEQFnoECA8QAQ&url=https%3A%2F%2Fwww.energy.ca.gov%2Ffilebrowser%2Fdownload%2F1215&usq=AOvVaw0UXebWqvEBWv7L8aJ_Nvba

¹⁰ Feather River Air Quality Management District, Federal Air Quality Plans: <https://www.fraqmd.org/federal-air-quality-plans>

¹¹ Operation of the Calpine Sutter Energy Plant produces 92 tons per year of particulate matter less than ten microns, 204 tons per year of nitrous oxide, 483 tons per year of carbon monoxide, 24 tons per year of volatile organic compounds, and 31 tons per year of sulfur dioxide, all of which harm human health (Final Determination of Compliance for the Sutter Power Plant from FRAQMD, Nov. 12, 1998 Appendix F page 7

https://www.energy.gov/sites/default/files/2017/08/f35/EIS-0294-FEIS-1999_appendices%20F%20-%20I.pdf). The plant emissions can violate both the 24-hour and annual PM10 health standards (Calpine Sutter Power Project Final Environmental Impact Statement Vol 1, DOE 0294, April 1999 page 4-13

https://www.energy.gov/sites/default/files/2017/08/f35/EIS-0294-FEIS-1999_main%20volume.pdf).

¹² For example, Sutter currently emits an average 45 tons of NOx per year. At 90% capacity, that would lead Sutter to emit more than 140 tons of NOx per year.

¹³ "The Gassing of Satartia," August 26 2021:

https://www.huffpost.com/entry/gassing-satartia-mississippi-co2-pipeline_n_60ddea9fe4b0ddef8b0ddc8f

¹⁴ The Sutter plant currently utilizes a natural gas pipeline that runs through the Sutter National Wildlife Refuge, so given Calpine's claims that they will use existing right of ways for carbon transportation it is likely that the carbon pipeline will run along the same pathway - meaning a leak would also pose a significant risk to waterfowl.

¹⁵ SB 905 (Caballero, 2022): Carbon Sequestration: Carbon Capture, Removal, Utilization, and Storage Program:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB905

Lastly, SMUD's claim that the CCS retrofit at Sutter is necessary to provide dispatchable generation to fill in the gaps is economically incorrect. The nature of IRA tax credits would mean a CCS-equipped Sutter plant would seek to operate around the clock -- closer to a baseload facility -- rather than filling in gaps, and would provide very little flexibility to either SMUD or the California Independent System Operator.

Beyond these technical points, SMUD's leadership in California carries implications beyond this proposed project. Your endorsement of the Sutter CCS retrofit sends the incorrect message that continuing to operate aging fossil fuel-fired electricity facilities, rather than replacing them with cheaper clean energy like wind and solar, is an appropriate solution to climate change. This will have unknown impacts on environmental justice communities elsewhere and our ambitious climate targets.

We urge SMUD to see the Sutter retrofit project as the dangerous delay tactic it is, one championed by the fossil fuel industry and other polluters who wish to continue business as usual while taking resources away from the needed transition to clean, cheaper renewable energy. Instead, there must be investment in an equitable transition to renewable solar and wind energy that upholds environmental justice and ends fossil fuels, leaving no worker or community behind. Supporting CCS operations at the Sutter plant or at any of SMUD's other generating facilities is simply the wrong way to go for our climate crisis and communities.

In sum, there are no upsides to moving forward with this partnership - only potential harm. Let's find a justice-centered path forward to a true zero emission future together.

Sincerely:

Katie Valenzuela
Central Valley Air Quality Coalition

Barbara Leary
Sierra Club Sacramento

Dan Ress
Center on Race, Poverty & the Environment

Valerie Kuo
USC Environmental Student Assembly

Nailah Pope-Harden
ClimatePlan

Robert M. Gould, MD
San Francisco Bay Physicians for Social Responsibility

Jack Eidt
SoCal 350 Climate Action

Herman Barahona
Sacramento Environmental Justice Coalition

Victoria Bogdan Tejeda
Climate Law Institute, Center for Biological Diversity

Harry Wang, MD
Physicians for Social Responsibility Sacramento Chapter

Eric Romann
Physicians for Social Responsibility Los Angeles

Laurie Litman
Third Act Sacramento

Amanda Millstein, MD
Climate Health Now

David Diaz, MPH
Active San Gabriel Valley

Shannon Smith
FracTracker Alliance

Daniel Chandler
350 Humboldt

Shoshana Wechsler
Sunflower Alliance

Elise Kalfayan
Glendale Environmental Coalition

Attached: [2023 Carbon Capture, Use, and Storage \(CCUS\) Platform](#)

From: [Rick Codina](#)
To: [Public Comment](#)
Subject: [EXTERNAL] Calpine CCS Project Presentation
Date: Sunday, May 14, 2023 6:22:58 PM

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Board members,

Unfortunately, personal circumstances cause me to be gone for this presentation and the follow-up Board vote on the 19th, although I did attend the earlier presentations in March and last week. I greatly appreciate staff's willingness and eagerness to share information) with the public at so many forums on all aspects of SMUD's proposed support for the Calpine carbon capture and sequestration (CCS).

I also have also discussed the CCS project extensively with interested colleagues, some of whom remain conflicted over issues of safety, technological readiness and the extent it will abet continuation of fossil fuel use, albeit carbon-free, into the next decades. The following summarizes my personal views on the project at this juncture.

1. The many technical and safety issues associated with CCS should be addressed with the relevant regulatory agency. These include the EPA (which is federally charged with power plant emission regulation), the DOE (which will provide funding under the IRA), CARB and the CEC. These will take place during the EIR and related reviews over the next three years.
2. Several particulars may make this particular project an ideal operational example for CCS at a medium-sized natural gas plant. These include:
 - The CO₂ pipeline is short, less than 10 miles, and will follow an existing pipeline. This compares to the hundred plus mile pipelines running near urban areas that have created problems elsewhere.
 - The carbon capture technology by ION is undergoing pilot testing at Calpine's natural gas power plant in Pittsburg, California.
 - Lawrence Livermore Lab's climate scientist, concluded that the proposed sequestration site, more than a mile below the surface, is uniquely suited for CO₂ storage where it will mineralize. The site must of course be approved by the EPA for Class VI disposal of CO₂, following rigorous guidelines for injection, transportation, storage and monitoring.
3. The Calpine unit will provide much-needed peak power for SMUD and the CAISO which cannot be met by renewable power like solar or wind, even with battery back-up.
4. The question that CCS will enable continuation of fossil-fuel combustion is correct. However, unlike utility-run power plants, the Sutter Energy Center is a merchant plant which very likely would otherwise remain operating with gas until the 2040's. Secondly, of course, is that the carbon-free power will allow SMUD to shut down its residual gas plants three years earlier.
5. This last point means that the project should be a major plus for environmental justice, since

the gas plant shutdowns will eliminate air pollution in surrounding Sacramento neighborhoods.

6. The proposed 12-year contract will allow SMUD and Calpine to demonstrate the feasibility of alternate carbon-free fuels such as hydrogen

My final personal recommendation is that -- assuming the regulatory environmental review hurdles can be met -- SMUD should move forward with its endorsement of the project.

However, it should craft its power contract carefully to insure it purchases only what it will need by decade's end so as not to forego pursuit of renewable projects.

Rick Codina

Sent from [Mail](#) for Windows

From: [Jan Smutny-Jones](#)
To: [Public Comment](#)
Subject: [EXTERNAL] Sutter Carbon Capture Project: Agenda 5/23/2030 (.Item 9 a-b)
Date: Monday, May 15, 2023 9:11:04 AM

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear SMUD Board Members<

As a SMUD ratepayer I strongly support the Sutter Carbon Capture Project modernizing an existing natural gas power plant with state-of-the-art carbon capture and sequestration technology. This plant currently provides power to SMUD providing reliability at affordable costs. The modernization of the Sutter facility will allow SMUD to advance our net zero carbon goals while maintaining reliable, affordable electricity. The Sutter Facility will be available to meet SMUD needs during Net Peak, the Winter Ramp and periods of low insolation caused by fires and weather. This may also allow for the closure of local peaking facilities within the service territory.

SMUD will play a primary role in this project as the purchaser of the project's electricity at a low risk. The project is utilizing funding through the U.S. Department of Energy with development risk primarily borne by the Calpine Corporation who has a long commercial history with SMUD. This is a rare opportunity for SMUD to commercialize a technology with strong financial support from the federal government. CCS technology will play an important role in lowering the carbon profile of the U.S. and meeting SMUD's climate change goals.

SMUD has been a leader in the electricity sector advancing projects and programs that supply power to meet our reliability and affordability needs. We are now embarking on a new path that will require a mixed portfolio of resources to continue this leadership. I urge you to support Agenda Item 9 (a) and (b). Thank you for your leadership.

Jan Smutny-Jones
smutnyjones@gmail.com
916-296-8584

From: [Bud Beebe](#)
To: [Public Comment](#); [Brandon Rose](#)
Subject: [EXTERNAL] May 17 Energy Resources Committee Mtg - Support Items 1.a & 1.b
Date: Tuesday, May 16, 2023 11:45:21 PM

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I'm a SMUD customer and I support approval of:

- SMUD participation in the DOE grant application for the Sutter Energy Center CCS project, and
- SMUD signing an MOA enabling negotiation of commercial terms for a potential PPA for offtake of energy from Calpine's Sutter Energy Center.

SMUD staff has identified need and good propose of this resource in the still unsettled resource mix capable of achieving the ZCP. I believe it will lower SMUD's resource risk in their flexible, still evolving push to a zero carbon future, and do so with substantial economic benefit from the DOE grant. Access to this power will not only reduce SMUD's risk in developing a viable mix in the medium term, it will also lessen pressure, both economic and technological, on development of the still evolving energy storage needs in Northern California.

I urge approval of items 1.a and 1.b.

H.I. Bud Beebe
Fair Oaks, CA

From: dc.derekcressman.com
To: [Public Comment](#)
Subject: [EXTERNAL] Public Comment re Agenda Item 9, Calpine CCS project
Date: Wednesday, May 17, 2023 1:21:57 PM

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

May 17, 2023

Derek Cressman
3104 O St #327
Sacramento, CA 95816
sent via e-mail

To the honorable and hard-working members of the SMUD Board,

I want to commend the SMUD staff, and particularly Board Chair Sanborn, for conducting an extensive public education process and soliciting feedback on Calpine's proposed power purchase agreement for the Sutter Energy Center. I firmly believe that through crowdsourcing the extensive knowledge and opinions held in the diverse Sacramento community will allow SMUD to arrive at wiser decisions.

The proposal to add a carbon capture and sequestration device to Calpine's fossil fuel plant promises to provide 24/7 dispatchable power for 365 days per year that is mostly/probably free of carbon dioxide emissions. Moreover, Calpine suggests that the scrubbing device will also reduce, perhaps significantly, the ground level nitrous oxide emissions that injure people through smog pollution. It's unclear what would become of the current fine particulate emissions although perhaps there will be some improvement there as well.

Sequestering carbon dioxide in underground rock formations in California's central valley is an idea with considerable merit, given that we need to reduce the amount of CO₂ in the atmosphere from 420 parts per million to 350 parts per million as rapidly as possible. Putting that carbon dioxide into concrete would make even more sense. So there is undoubtedly a role for carbon sequestration, particularly for industrial sources of heat that are difficult to electrify like steel making and aviation. Whether CCS makes sense to produce electricity itself is more economically dubious.

Moreover, if the Sutter plant continues to rely upon fossilized methane as a fuel source, it cannot be considered a carbon zero energy source so long as natural gas mining and transmission pipelines continue to leak methane into the atmosphere at levels that greatly contribute to the global climate emergency. We need to stop extracting fossil fuels from the Earth and instead not only leave them in the ground but pump the by-products of their combustion over the past 100 years back underground.

Anyone who remembers the false energy "crisis" deliberately manufactured by Enron and other financial speculators who threatened to stick it to Grandma Millie at the turn of this century knows the value of a firm and reliable source of energy that is completely within the control of SMUD engineers. There is nothing quite like the macho thrill and relative ease of unleashing megawatts of baseload power with the flip of a switch and stroke of a few keys on a computer.

But if the SMUD Board and staff carefully consider our coming energy markets, you might find that the baseload power that felt so essential last century isn't quite what Sacramento County needs in the current environment of cheap and abundant renewable power during all but about three weeks a year when short days and rainclouds greatly diminish solar and wind output. By offering somewhat expensive and not quite carbon free power for 365 days a year when what is needed is 20 days of truly zero carbon power, Calpine's proposed solution to SMUD's coming energy needs feels a bit like using yesterday's answers for tomorrow's test.

Calpine is promising that the cost of its carbon captured electricity will be comparable to today's prices for solar plus storage. This sounds like a good price at night, but during daylight hours and early evening it suggests that Calpine's power will be considerably more costly than either solar or wind on its own, without storage. In an era where natural gas prices are unstable and could rise substantially over the next twelve years while the price of battery storage is coming down significantly, what is currently cost-competitive at night might turn out to be an unwise commitment in just a few years. Moreover, Calpine will only achieve this price because the federal government, at the insistence of coal baron Senator Joe Manchin, is taking substantial sums of money from Sacramento taxpayers (and others around the United States) and giving it to the private Calpine Corporation so that it can pump its carbon a half a mile underground. That's not exactly an economic model that a community owned non-profit utility like SMUD would want to brag about.

There is also a high probability that Calpine will seek special dispensation to turn off its carbon capture scrubber during future power emergencies, such as California experienced during last year's extreme heat wave. Any governor will likely to grant such permission because it will increase the power output of the plant, thus ensuring that at precisely the moment's when SMUD most needs zero carbon power, the Sutter Plant will be producing the same deadly CO₂-laden electricity that it does today.

Because of both the generous redistribution of wealth from taxpayers to energy corporations contained in the Inflation Reduction Act and the newly issued regulations from the Environmental Protection Agency requiring baseload natural gas plants to add carbon capture and sequestration, it is highly likely that Calpine will be retrofitting its Sutter Energy Center with or without a power purchase agreement from SMUD. It is their only path to staying open and generating future profits. It would be a bit ironic for SMUD to position itself as a driver of innovation and technology simply by purchasing power from a private fossil fuel company that was simply doing what was already required of it by federal law.

As an alternative, SMUD might consider contracting with the offshore wind development that plans to produce 2,000-5,000 megawatts of power off California's coast by 2030. SMUD could build a dedicated transmission line under water from the offshore sites, up through the San Francisco Bay and Sacramento River Delta, perhaps tying into the Solano Wind farm lines. These underwater lines might prove longer but considerably easier to permit and install than additional above ground transmission. While you're at it, you could co-locate solar photovoltaic cells and flow batteries in the windfarm sites where avian habitat has already been degraded instead of destroying pristine land with the Coyote Creek and other industrial scale solar projects. Fortunately, the Inflation Reduction Act also provides for taxpayer dollars to flow to consumer-owned utilities like SMUD, so we might as well reap these benefits and not let the for-profit energy providers have all the fun.

As solar and wind become more abundant to the point where we will often have an energy surplus, it will become easier to bank the hydropower in the Upper American River Project for those twenty days a year when we really need it. Adding pumped hydro storage to parts of that system would increase that opportunity even more. And, if you're really keen on pumping stuff into the ground, consider using forced air storage in some of the current underground sites that currently store SMUD's natural gas. Thermal batteries that store copious amounts of heat in giant piles of sand for weeks on end are also promising technology, as are enhanced geothermal techniques.

Should all alternatives fail and SMUD find itself in need of carbon-reduced electricity in the next twelve years, it will likely be able to purchase it from the Sutter Plant just as it has been for the past year to replace power from the failed Cosumnes Gas plant (a reminder that even baseload power isn't really as reliable as it is advertised.) This would likely be at higher spot marking prices for those 20 or so days a year, but overall might prove a better bargain than buying in to the whole project now. Perhaps SMUD should consider a special energy shortage rate during those rare times when California as a whole lacks sufficient electrical supply and needs to import more expensive power from northwest hydro plants and beyond. Similarly to the peak pricing used during summer months from 5-8 PM, this pricing would both produce an incentive for demand side conservation during those periods of scarcity and cover the increased costs of supply.

Given the remaining problems with fossilized methane and prospects for superior alternatives, the board would be well advised to consider a wait and see approach to this interesting proposal.

Sincerely,

Derek Cressman
SMUD Customer and Sacramento voter

From: [Reyna Jimenez](#)
To: [Public Comment](#)
Subject: [EXTERNAL] Memo for tonight's meeting
Date: Wednesday, May 17, 2023 3:09:34 PM
Attachments: [Support Letter for SMUD.pdf](#)

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

Please see attached letter.

Reyna Jimenez

IBEW Local 340

Office Manager

10240 Systems Parkway, Suite 100

Sacramento, CA 95827

(o) 916-927-4239 ext. 1003

(c) 916-539-0412



INTERNATIONAL BROTHERHOOD
OF ELECTRICAL WORKERS

www.ibewlocal340.org



Dear Board Members,

On behalf of IBEW Local 340

I am writing my conditional support of SMUD's participation in the Sutter Energy Center Carbon Capture and Sequestration Project grant application by Calpine Corporation to the US Department of Energy. This project seeks to meet California's robust climate change goals by capturing approximately 1.5 million tons of CO₂. This site would be the first of its kind, air-cooled, carbon capture facility that utilizes state of the art technology to deliver carbon abated clean energy to the residents of Sacramento.

The Sutter Energy Center Carbon Capture and Sequestration Project could make a valuable addition to not only Sacramento's community, but to the community in Sutter as well. This project could provide much needed jobs and economic development to the region. I am confident that the project could be completed on time and under budget, utilizing a skilled and trained workforce.

However, I am concerned that the project will not be successful if the builder does not utilize a project labor agreement (PLA). A PLA is a collective bargaining agreement between a construction company and labor unions representing the workers who will be building the project. PLAs have many benefits, including:

- **Reduced Costs:** PLAs can help to reduce costs on construction projects by providing a more stable workforce and ensuring that all workers are paid a fair wage and receive good benefits. This helps to avoid the costs associated with hiring and training new workers.
- **Faster Project Completion:** They prevent labor disputes and project delays.
- **Building the Next Generation:** PLAs often include provisions for hiring apprentices and trainees, which help to build a skilled and trained workforce for the future.
- **Community Benefits:** They create community benefits by requiring a certain percentage of workers on the project be from the local community.
- **Increasing Accountability:** Accountability during construction by providing a clear chain of command and by requiring that all workers adhere to the projects rules and regulations. This helps prevent fraud and abuse by low road contractors.

As you are aware, the Biden Administration has made a point to utilize and promote Project Labor Agreements on large scale projects that receive over \$35 million in federal funding. Congress has also signaled support for PLAs in both the Infrastructure Investment and Jobs Act, as well as in the Inflation Reduction Act. This forward thinking is directly tied to the economic benefits that communities who utilize a PLA receive.

On behalf of all of the members of IBEW Local 340 and community, we ask that you stand with the Building Trades Council and make a Project Labor Agreement a condition of your participation in this grant process. As we have seen in Sacramento, Project Labor Agreements lead to better outcomes for our communities by continuing the Building Trades Council's tradition of providing high road, living wage career opportunities for the local residents of a project.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. D. Ward", written in a cursive style.

Robert D. Ward

Business Manager/Financial Secretary

From: Nguyen, Le-Quyen@CNRA
To: [Public Comment](#)
Subject: [EXTERNAL] CCS Support Letter
Date: Wednesday, May 17, 2023 4:29:15 PM
Attachments: [image001.png](#)
[SMUD CCS Support Letter GO-Biz.pdf](#)

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

Please find attached a support letter for carbon removal efforts in California. Please let me know if you have any questions.

Thanks,
Le-Quyen

Le-Quyen Nguyen

Deputy Secretary for Energy
California Natural Resources Agency
(916) 508-4655



[Celebrate AAPI Month with us!](#)



GOVERNOR'S OFFICE OF BUSINESS AND ECONOMIC DEVELOPMENT

STATE OF CALIFORNIA ♦ OFFICE OF GOVERNOR GAVIN NEWSOM

May 17, 2023

SMUD Board of Directors
6301 S St.
Sacramento, CA 95817

Subject: Letter of Support for Carbon Removal Efforts in California

Dear SMUD Board of Directors:

The California Governor's Office of Business and Economic Development (GO-Biz), on behalf of the Newsom Administration, write to express our support for carbon removal efforts in California.

GO-Biz is the state's leader for job growth, economic development, and business assistance efforts. As part of this role, GO-Biz actively coordinates agency actions and goals to drive industry growth and develop a clean, carbon neutral economy.

The Newsom Administration has identified carbon capture and sequestration (CCS) as a key strategy in our efforts to reach carbon neutrality by 2045,¹ and to meet carbon dioxide removal targets of 20 million metric tons and 100 million metric tons in 2030 and 2045, respectively. CCS projects developed in the state will advance and directly contribute to our efforts to create a carbon neutral economy, create family supporting jobs and advance equity.

Please do not hesitate to contact me at tyson.eckerle@gobiz.ca.gov if you have any questions or if there is any other way that we can be of assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tyson Eckerle".

Tyson Eckerle
Senior Advisor for Clean Infrastructure and Mobility
California Governor's Office of Business and Economic Development

¹ See 2022 Scoping Plan

**SACRAMENTO-SIERRA'S BUILDING & CONSTRUCTION TRADES COUNCIL**

Representing over 25,000 union construction workers in Sacramento, Yolo, Placer, El Dorado, Amador, Nevada & Sierra Counties

To the Sacramento Municipal Utility District Board of Directors,

On behalf of over 15,000 union construction workers from all the affiliates of the Sacramento Sierra Building and Construction Trades Council, I am writing my conditional support of SMUD's participation in the Sutter Energy Center Carbon Capture and Sequestration Project grant application by Calpine Corporation to the US Department of Energy. This project seeks to meet California's robust climate change goals by capturing approximately 1.5 million tons of CO₂. This site would be the first of its kind, air-cooled, carbon capture facility that utilizes state of the art technology to deliver carbon abated clean energy to the residents of Sacramento.

The Sutter Energy Center Carbon Capture and Sequestration Project could make a valuable addition to not only Sacramento's community, but to the community in Sutter as well. This project could provide much needed jobs and economic development to the region. I am confident that the project could be completed on time and under budget, utilizing a skilled and trained workforce.

However, I am concerned that the project will not be successful if the builder does not utilize a project labor agreement (PLA). A PLA is a collective bargaining agreement between a construction company and labor unions representing the workers who will be building the project. PLAs have many benefits, including:

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- **Community Benefits:** They create community benefits by requiring a certain percentage of workers on the project be from the local community.



- **Increasing Accountability:** Accountability during construction by providing a clear chain of command and by requiring that all workers adhere to the project’s rules and regulations. This helps prevent fraud and abuse by low road contractors.

As you are aware, the Biden Administration has made a point to utilize and promote Project Labor Agreements on large scale projects that receive over \$35 million in federal funding. Congress has also signaled support for PLAs in both the Infrastructure Investment and Jobs Act, as well as in the Inflation Reduction Act. This forward thinking is directly tied to the economic benefits that communities who utilize a PLA receive.

On behalf of all of the members of the Sacramento Sierra Building Trades Council and community, we ask that you stand with us and make a Project Labor Agreement a condition of your participation in this grant process. As we have seen in Sacramento, Project Labor Agreements lead to better outcomes for our communities by continuing the Council’s tradition of providing high road, living wage career opportunities for the local residents of a project.

Thank you for your time and consideration.

Sincerely,

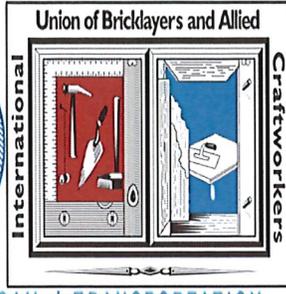


Kevin Ferreira
Executive Director



Todd Schiavo
President





LIUNA!

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SMART

Exhibit to Agenda Item #10

Approve the issuance of **SMUD 2023 Revenue Refunding Bonds, SMUD 2023 Subordinated Electric Revenue Refunding Bonds, SMUD 2023 Electric Revenue Bonds** and/or **SMUD 2023 Subordinated Electric Revenue Bonds**, authorize the distribution of the **Preliminary Official Statement**, and authorize the Chief Executive Officer and General Manager to execute documents necessary to complete the refunding transaction or transactions, including the **Bond Purchase Agreement or Agreements** and **Credit Support Agreements**.

Board of Directors Meeting

Thursday, May 18, 2023, scheduled to begin at 6:00 p.m.

SMUD Headquarters Building, Auditorium

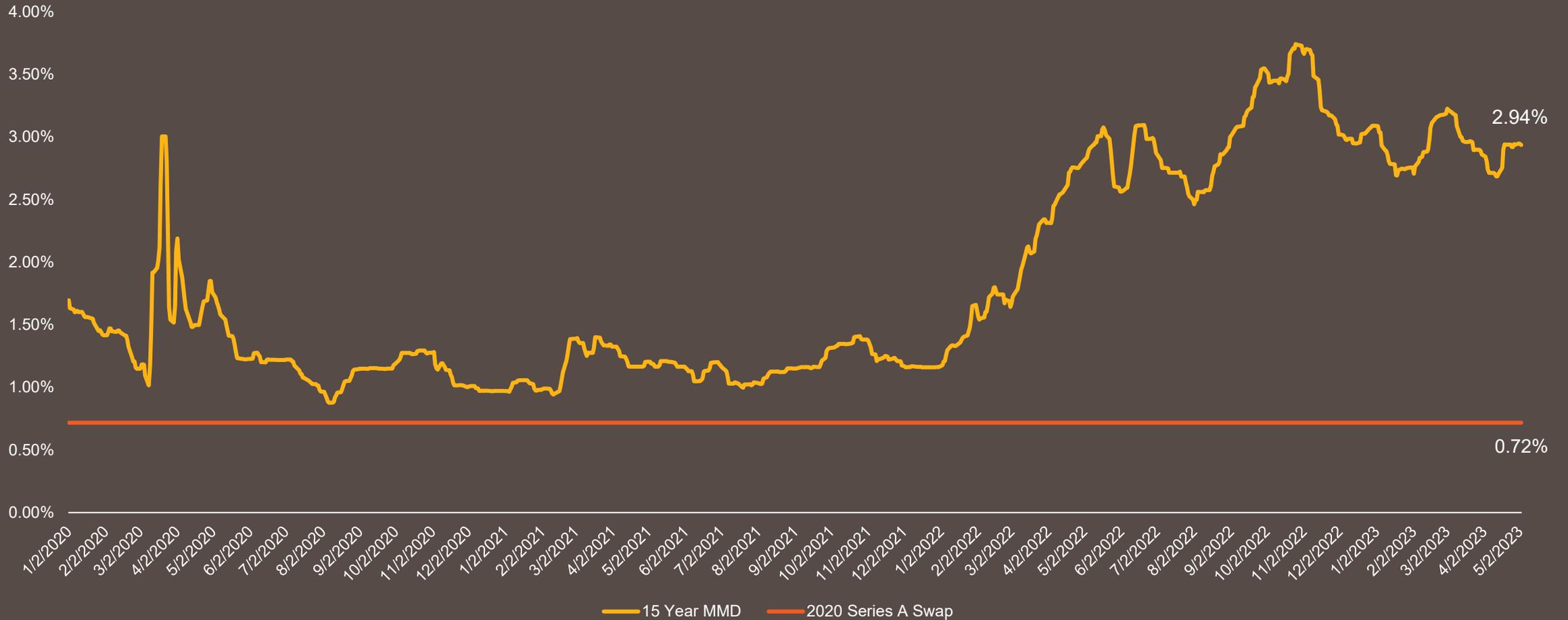
Authorize Staff to Proceed with Bond Refundings

Issuance of 2023 Senior and/or Subordinated Refunding Bonds

- Refund the remaining \$208 million 2013 Series A and 2013 Series B bonds
 - Provides approximately \$89 million cash flow savings (\$69 million net present value)
 - ✓ \$6.19 million per year cash flow savings for the first 10 years and \$4.4 million for the subsequent 8 years
 - Seeking authorization for three options below.
 - **Option 1:** Issue approximately fixed rate bonds with maturities from 2024 to 2041
 - Terminates the forward starting interest rate swaps (hedges) entered in 2020, or
 - **Option 2:** Issue approximately variable rate bonds with similar maturities.
 - Swaps become effective resulting in synthetically fixed (hedged) bonds, or
 - **Option 3:** Issue a combination of fixed rate bonds or variable rate bonds to maximize savings

Staff will determine the option that maximizes savings and limits risk closer to the sale date.

Swap Provided Rate Protection



Authorize Bond Refundings, cont.

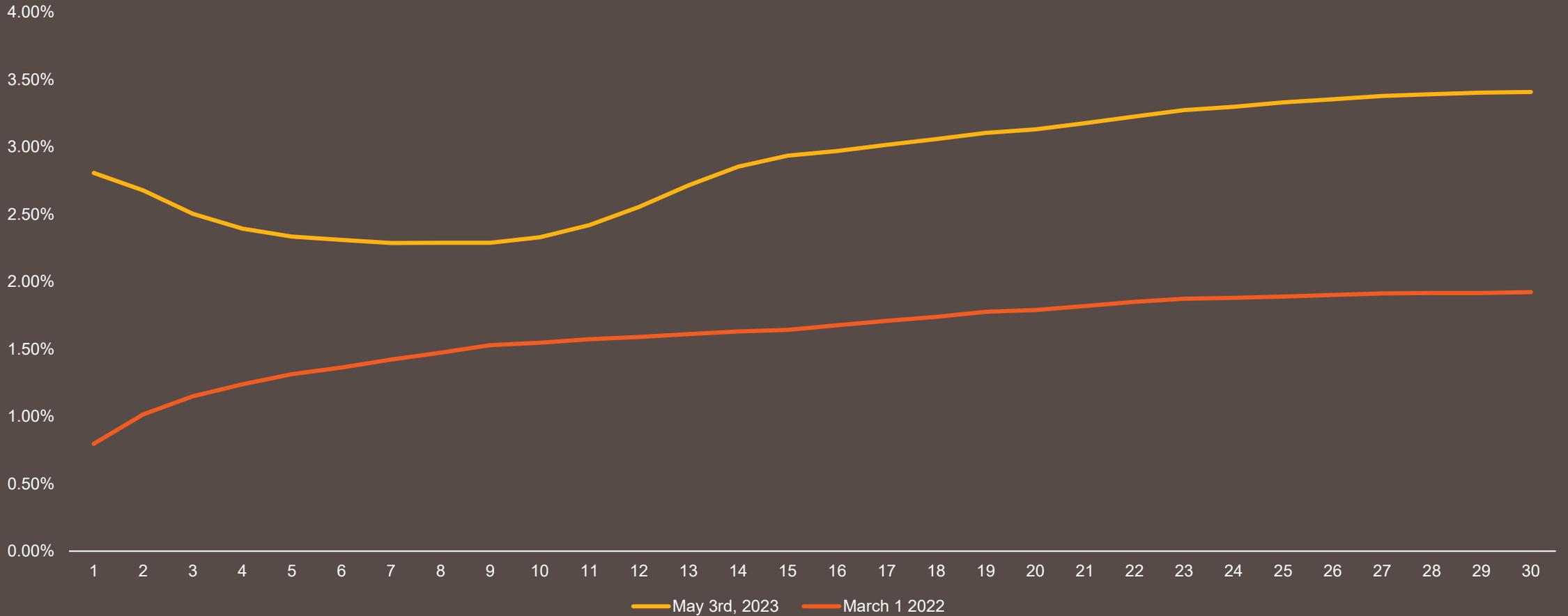
Issuance of 2023 Subordinated Refunding Bonds

- Remarket \$100 million 2019 Series A Bonds
 - Issued in 2019 as a 4-year "Put" bond with a 2049 final maturity
 - Plan is to remarket with another 5 to 7 year "Put".
 - ✓ Lowest current rates across the interest rate curve
 - ✓ Continues to add portfolio diversification and lower funding costs

Issuance of 2023 Senior Revenue Refunding Bonds

- Refund \$200 million of Commercial Paper (CP) with traditional long term fixed rate bonds
 - Issued to manage cash levels through the CPP outage and associated commodity market volatility
 - Refunding restores full \$400 million capacity for future capital expenditures and unplanned events
- Authorize issuing up to \$100 million additional long term bonds if needed

Current Tax-Exempt MMD* Interest Rate Curve



* Municipal Market Data

Authorize Staff to Execute Necessary Documents

Necessary Financing Documents

- Preliminary Official Statement (POS) -Primary Disclosure Document
- Bond Purchase Agreements
- All other necessary documents to complete transactions (swap confirms, tax certificate, etc.)

Green Bond Designation

SMUD exploring pursuit of a Green Designation

- Some organizations such as Climate Bond Initiative (CBI) have expressed interest in certifying issuers to begin standardizing for investors
- No specific qualifying prior capital costs given the stringent definitions, but progress on the Zero Carbon Plan and Clean Energy Vision may support obtaining
- Staff discussing options with Kestrel Verifiers, who verified our prior Green Bond issuances in 2019 and 2020.

SB 450: Public Disclosure Requirement Related to Bond Issuance

Government Code Section 5852.1 requires a Good Faith Estimate of Cost provided by the Underwriter/Financial Advisor

2023 Senior and Subordinated Refunding Bonds Good Faith Estimate of Cost

True Interest Cost (TIC):	2.585%
Cost of Issuance:	\$1,501,625
Bond Proceeds:	\$604,750,824
Total Payment Amount:	\$852,964,094

Note: "Total Payment Amount" on Refunded bonds was \$941 million, producing savings of \$89 million



Questions?

SSS No. LEG 2023-0061

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date Policy Committee – 05/10/23
Board Meeting Date June 15, 2023

TO	TO
1. Laurie Rodriguez	6.
2. Jose Bodipo-Memba	7.
3. Jennifer Davidson	8.
4.	9. Legal
5.	10. CEO & General Manager

Consent Calendar	<input checked="" type="checkbox"/>	Yes	No <i>If no, schedule a dry run presentation.</i>	Budgeted	<input type="checkbox"/>	Yes	No <i>(If no, explain in Cost/Budgeted section.)</i>
FROM (IPR) Laura Lewis	DEPARTMENT Executive Office			MAIL STOP B308	EXT. 6123	DATE SENT 05/15/23	

NARRATIVE:

Requested Action: Approve proposed revisions to **Governance Process GP-12, Board Compensation and Benefits.**

Summary: At the Policy Committee meeting of December 2, 2020, President Kerth appointed an Ad Hoc Committee to review the policy and bring a recommendation back to the full Board with regard to a cost of living increase or other amendments. The Ad Hoc Committee consisted of Director Bui-Thompson (Chair) and Director Fishman.

At the May 10 Policy Committee, the Ad Hoc Committee provided its recommendation. Copies of the proposed revisions are attached in redline and “clean” format.

Board Policy: Governance Process GP-12, Board Compensation and Benefits
(Number & Title)

Benefits: Enables Board members to review the policy in light of present-day factors.

Cost/Budgeted: N/A

Alternatives: Maintain the existing policy; approve a different revision.

Affected Parties: Board Members

Coordination: Executive Office, Board Office, People Services & Strategies, and Legal

Presenter: Director Bui-Thompson

Additional Links:

SUBJECT Approve Proposed Revisions to Governance Process GP-12, Board Compensation and Benefits	ITEM NO. (FOR LEGAL USE ONLY) <b style="font-size: 1.5em; color: blue;">5
-----------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SMUD BOARD POLICY	
Category: Governance Process	Title: Board Compensation and Benefits
	Policy Number: GP-12
Date of Adoption: December 19, 2002	Resolution No. 02-12-14
Revision Date: October 16, 2003	Resolution No. 03-10-14
Revision Date: December 2, 2004	Resolution No. 04-12-03
Revision Date: December 1, 2005	Resolution No. 05-12-10
Revision Date: May 17, 2007	Resolution No. 07-05-08
Revision Date: July 16, 2009	Resolution No. 09-07-02
Revision Date: September 18, 2014	Resolution No. 14-09-07
Revision Date: December 20, 2018	Resolution No. 18-12-15
Revision Date: December 12, 2019	Resolution No. 19-12-05
<u>Revision Date: June 15, 2023</u>	<u>Resolution No. 23-06-</u>

In keeping with the MUD Act, members of the Board of Directors are entitled to compensation for their service. Specifically:

- a) Each Board member ~~shall~~may receive for each attendance at the meetings of the full Board, Board committee meetings, ad hoc committee meetings, publicly noticed SMUD workshops or meetings, other publicly noticed meetings where the Board member is representing the Board, state or federal legislative briefings or meetings where the Board member is representing the Board, meetings with SMUD customers or staff relating to SMUD business, community meetings or events where the Board member is representing SMUD, events where SMUD is being recognized, conferences and organized educational activities, the sum of \$275317.00 per day of service. No director ~~shall~~may receive compensation for more than ten (10) days in any one calendar month. Campaign and political meetings, events, and fundraisers are not compensable under this policy.
- b) Each Board member ~~shall~~may also be reimbursed for expenses related to travel, meals, lodging and other actual and necessary expenses incurred in the performance of his or her official duties as described in subsection (a).

Reimbursement shall be in accordance with Internal Revenue Service regulations as established in Publication 463, or any successor publication.

- c) Each Board member may be reimbursed for computer and other technology purchases, rentals, and refurbishments that will aid them in the performance of their duties pursuant to reimbursement policies applicable to executive and senior leaders.
- d) Compensation forms shall be completed by a Director and distributed by the Board office for review and approval prior to a Board meeting. The Board shall review and approve compensation and any request for technology reimbursement at each regular Board meeting. Board member compensation, along with any requests for technology reimbursement, shall be placed on the consent calendar at each regular Board meeting, unless a Board member requests that it be placed on the discussion calendar. Expense reimbursement forms and requests for expenditures for travel and training shall be completed by a Director and submitted to the Board President or Vice President for approval as appropriate.
- e) SMUD shall provide and contribute payment for health care benefits, equivalent to the contribution made to SMUD employees in the PAS employee group, to any Board member who elects such benefit, and additionally make an annual contribution payment of \$500 to a Flexible Spending Account.
- f) Subject to the applicable tax codes and IRS rules and regulations, and to the extent possible, SMUD shall direct payment to a SMUD defined contribution plan (either a 457(b) plan or a 401(k) plan) for each Director who elects to have such a benefit in the amount of 30% of compensation based on days of service. Directors who elect to receive this benefit must (1) have a SMUD defined contribution plan and (2) direct payment to the defined contribution plan of their choice at initial enrollment and then during (and only during) SMUD's open enrollment period for employee benefits.

Monitoring Method: Board Report
Frequency: Annual

SMUD BOARD POLICY	
Category: Governance Process	Title: Board Compensation and Benefits
	Policy Number: GP-12
Date of Adoption: December 19, 2002	Resolution No. 02-12-14
Revision Date: October 16, 2003	Resolution No. 03-10-14
Revision Date: December 2, 2004	Resolution No. 04-12-03
Revision Date: December 1, 2005	Resolution No. 05-12-10
Revision Date: May 17, 2007	Resolution No. 07-05-08
Revision Date: July 16, 2009	Resolution No. 09-07-02
Revision Date: September 18, 2014	Resolution No. 14-09-07
Revision Date: December 20, 2018	Resolution No. 18-12-15
Revision Date: December 12, 2019	Resolution No. 19-12-05
Revision Date: June 15, 2023	Resolution No. 23-06-__

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- a) Each Board member may receive for each attendance at the meetings of the full Board, Board committee meetings, ad hoc committee meetings, publicly noticed SMUD workshops or meetings, other publicly noticed meetings where the Board member is representing the Board, state or federal legislative briefings or meetings where the Board member is representing the Board, meetings with SMUD customers or staff relating to SMUD business, community meetings or events where the Board member is representing SMUD, events where SMUD is being recognized, conferences and organized educational activities, the sum of \$317.00 per day of service. No director may receive compensation for more than ten (10) days in any one calendar month. Campaign and political meetings, events, and fundraisers are not compensable under this policy.
- b) Each Board member may also be reimbursed for expenses related to travel, meals, lodging and other actual and necessary expenses incurred in the performance of his or her official duties as described in subsection a).

Reimbursement shall be in accordance with Internal Revenue Service regulations as established in Publication 463, or any successor publication.

- c) Each Board member may be reimbursed for computer and other technology purchases, rentals, and refurbishments that will aid them in the performance of their duties pursuant to reimbursement policies applicable to executive and senior leaders.
- d) Compensation forms shall be completed by a Director and distributed by the Board office for review and approval prior to a Board meeting. The Board shall review and approve compensation and any request for technology reimbursement at each regular Board meeting. Board member compensation, along with any requests for technology reimbursement, shall be placed on the consent calendar at each regular Board meeting, unless a Board member requests that it be placed on the discussion calendar. Expense reimbursement forms and requests for expenditures for travel and training shall be completed by a Director and submitted to the Board President or Vice President for approval as appropriate.
- e) SMUD shall provide and contribute payment for health care benefits, equivalent to the contribution made to SMUD employees in the PAS employee group, to any Board member who elects such benefit, and additionally make an annual contribution payment of \$500 to a Flexible Spending Account.
- f) Subject to the applicable tax codes and IRS rules and regulations, and to the extent possible, SMUD shall direct payment to a SMUD defined contribution plan (either a 457(b) plan or a 401(k) plan) for each Director who elects to have such a benefit in the amount of 30% of compensation based on days of service. Directors who elect to receive this benefit must (1) have a SMUD defined contribution plan and (2) direct payment to the defined contribution plan of their choice at initial enrollment and then during (and only during) SMUD's open enrollment period for employee benefits.

Monitoring Method: Board Report
Frequency: Annual

DRAFT

RESOLUTION NO. _____

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

This Board approves the revisions to the **Governance Process GP-12, Board Compensation and Benefits**, substantially in the form as set forth in **Attachment ____**.

SSS No.
DP&O 23-005

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date Policy – 06/07/23
Board Meeting Date June 15, 2023

TO	TO
1. Claire Rogers	6. Suresh Kotha
2. Frankie McDermott	7.
3. Brandy Bolden	8.
4. Farres Everly	9. Legal
5. Jennifer Davidson	10. CEO & General Manager

Consent Calendar	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	<i>If no, schedule a dry run presentation.</i>	Budgeted	<input checked="" type="checkbox"/>	Yes	No	<i>(If no, explain in Cost/Budgeted section.)</i>
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FROM (IPR) Maria Veloso Koenig	DEPARTMENT Distribution Planning & Operations	MAIL STOP EA403	EXT. 5794	DATE SENT 5/10/2023
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NARRATIVE:

Requested Action: Accept the monitoring report for **Strategic Direction SD-4, Reliability.**

Summary: The purpose of this report is to provide the Board with an update on SD-4, Reliability for the year 2022. The information in the monitoring report can be used by the Board to determine if any policies or metrics need to be changed or further developed.

Board Policy: *(Number & Title)* Strategic Direction SD-4, Reliability. The information in the monitoring report will provide a summary of system reliability, availability, and related activities for 2022.

Benefits: Allows the Board of Directors and Executive staff a better understanding of the Board Policies and gives them an opportunity to make revisions if necessary.

Cost/Budgeted: N/A

Alternatives: Provide the Board written report and communications through the CEO & General Manager.

Affected Parties: Power Generation, Transmission Planning & Operations

Coordination: Power Generation, Transmission Planning & Operations

Presenter: Maria Veloso Koenig; Director, Distribution Planning & Operations

Additional Links:

SUBJECT SD-4, Reliability Board Monitoring Report	ITEM NO. (FOR LEGAL USE ONLY) 6
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: May 24, 2023

FROM: Claire Rogers *CR 5/24/23*

**SUBJECT: Audit Report No. 28007604
Board Monitoring Report; SD-04: Reliability**

Audit and Quality Services (AQS) received the SD-04 *Reliability* 2022 Annual Board Monitoring Report and performed the following:

- Selected a sample of statements and assertions in the report for review.
- Interviewed report contributors and verified the methodology used to prepare the statements in our sample.
- Validated the reasonableness of the statements in our sample based on the data or other support provided to us.

During the review, nothing came to AQS' attention that would suggest the items sampled within the SD Board Monitoring report did not fairly represent the source data available at the time of the review.

CC:

Paul Lau

**Board Monitoring Report 2022
Strategic Direction
SD-4, Reliability**



1) Background

Strategic Direction SD-4 Reliability states that:

Meeting customer energy requirements is a core value of SMUD.

Therefore:

- a) SMUD will assure all customer energy requirements are met. This will be accomplished through the use of: (i) its generation resources and purchase power portfolio 100 percent of the time; and (ii) its transmission assets to assure an overall availability of at least 99.99 percent.

- b) SMUD will achieve distribution system reliability by:

Limiting the average frequency of outage per customer per year to:

With major event: 0.99 – 1.33
Excluding major event: 0.85 – 1.14

Limiting the average duration of outages per customer per year to:

With major event: 67.5 – 93.3 minutes
Excluding major event: 49.7 – 68.7 minutes

Ensuring that no individual circuits exceed these targets for more than two consecutive years. For circuits that exceed these targets for two consecutive years, a remedial action plan will be issued and completed within eighteen months.

- c) SMUD will maintain the electric system in good repair and make the necessary upgrades to maintain load serving capability and meet regulatory standards.

2) Executive summary

Improving reliability is essential to meeting customer energy requirements and drives customer loyalty.

SMUD was in compliance for both generation and transmission availability. SMUD met all energy supply requirements 100% of the time through its generation resources and purchased power. At a peak load of 3,292 MW (which occurred on September 6),

42% of the generation was provided by internal resources and 58% was provided by purchased power. The transmission availability was at 100% for the year.

SMUD was in compliance for both SAIDI and SAIFI (excluding major events).

Reliability targets including major events were met for SAIFI (1.28) and exceeded for SAIDI (175.8 minutes). The 2022 distribution system reliability performance is summarized in Table 1 below.

Table 1: 2022 Distribution System Reliability Performance

	With Major Events		Excluding Major Events	
	SD-4 Limit	2022 Results	SD-4 Limit	2022 Results
SAIFI	1.33	1.28	1.14	0.93
SAIDI (minutes)	93.3	175.8	68.7	53.7

Major events are defined as events caused by earthquake, fire, or storms of sufficient intensity which result in a state of emergency being declared by the government. Absent the declaration of a state of emergency, any other natural disaster may be excluded only if it affects more than 15% of the system facilities or 10% of the customers, whichever is less.

There are 763 distribution circuits of which 99.1%, or 756 circuits, met the SD-4 reliability criteria. Thirteen projects were issued to improve reliability, of which seven have been completed. The remaining six projects are on schedule to be completed within the eighteen-month requirement. These projects include primarily cable replacement, avian mitigation, TripSaver recloser installations and other work.

3) Additional supporting information

Generation

Hydro Generation Facilities

The availability rate for SMUD’s hydro generation system in 2022 was 90.72% and for the June 1st through September 30th period, hydro generation availability was 99.14%. SMUD’s Upper American River Project (UARP) hydro system generated 984,820 MWh. The budgeted generation was 1,302,861 MWh.

Gas Pipeline Operations

SMUD’s gas pipeline had a 100% availability rating in 2022 and provided a constant flow of gas to SMUD’s thermal generation facilities. All necessary maintenance activities

were successfully completed in accordance with our operations and maintenance plans and procedures.

Thermal Generation Facilities

The overall availability rate for SMUD's thermal generation facilities in 2022 was 67.04% and for the June 1st through September 30th period, thermal plant availability was 58.54%. SMUD's thermal generation facilities generated a net total of 2,860,926 MWh against the budgeted generation of 5,476,313 MWh.

The lower thermal plant availability was caused by extended outages at Cosumnes Power Plant. It started with an extensive 88 day planned outage to overhaul the steam turbine, one combustion turbine and several balance of plant items. This was followed by an eight-month unplanned outage to rebuild the stator on the steam turbine generator.

Transmission and Distribution

SMUD has approximately 488 miles of transmission lines and 10,734 miles of distribution lines including 69kV. Approximately 40% of the distribution lines are installed overhead and 60% are installed underground. The transmission system is predominately overhead except for 19 miles of underground lines located in the Carmichael and downtown areas.

Staff monitors circuit reliability regularly to assess circuits that could potentially exceed the reliability limits. Outage causes, trends, and reliability impacts are analyzed to identify corrective actions that will bring the reliability of these circuits within the acceptable range.

4) Challenges

SMUD's distribution system had excellent reliability for most of 2022. On the evening of New Year's Eve, the first of nine atmospheric river storms hit northern California. This single event created significant damage to the grid, affecting approximately 227,000 customers, a SAIDI contribution of 122.1 minutes, and a SAIFI contribution of 0.35 on December 31st alone. The unexpected storm brought over 60 mph wind gusts, with 48mph sustained winds, coupled with almost two inches of rain. With the already saturated the ground and heavy rains combined with high winds, over 1000¹ trees overs several days were uprooted all over Sacramento region and many trees fell onto SMUD's overhead lines. These types of tree related outages take longer to resolve

¹ <https://www.cpradio.org/articles/2023/01/12/why-did-so-many-trees-fall-in-sacramento-what-to-know-about-damage-to-citys-tree-canopy-amid-storms/#:~:text=%E2%80%9Cve%20been%20here%2032,fallen%20since%20New%20Years'%20Eve.>

since the trees must be removed from the tangled powerlines prior to the start of rebuilding the lines.

Drivers for Reliability Performance

The main drivers for the distribution system performance excluding major events, along with the mitigation measures for each, are summarized below.

Vehicle Accidents

The leading cause of outages in 2022 was vehicle accidents. Overall, there was a 14% increase in the number of vehicle accidents, with a 3% increase in SAIDI minutes and a 22% decrease in SAIFI, when comparing with 2021. Although there was an increase in the number of vehicle accidents, the significant decrease in SAIFI is attributed to reduced vehicle accidents that impacted our 69kV system. There were three fewer 69kV vehicle accidents in 2022 compared to 2021. Overall vehicle accidents can likely be attributed the return to pre-pandemic vehicle traffic on roadways.

One pole was relocated in 2022 as part of the Vehicle vs Asset program. Staff continues to monitor and analyze vehicle related outages for remediation as part of the Vehicle vs Asset program.

Equipment Failures

Equipment failures are associated with a wide variety of distribution line components, such as fuses, poles, wire hardware, broken connectors, broken jumpers, failed transformers, broken cutouts and more. Outages due to failed equipment continue to be evaluated to locate and address any systemic deficiencies.

Failed equipment was the second leading cause of outages in 2022. When compared to 2021, outages due to equipment failures increased by 2%. Many equipment failures were on the 12kV system. There was a decrease of equipment failures on the 69kV and 21kV systems, which helped reduce SAIDI and SAIFI by 8% and 21%, respectively.

Multiple inspection and maintenance programs are in place to identify and correct deficiencies before they result in failure. We have annual line patrols to detect obvious deficiencies. In addition, we perform detailed line inspections (DLI) every five years. During a DLI, the inspector examines every attachment on the pole and documents deficiencies found. The deficiencies are prioritized and repaired based upon pre-determined schedules.

Underground Cable Failures

In 2022, underground cable failures were the third leading cause of outages. However, outages due to cable failures decreased by 2% compared to 2021. Additionally, SAIDI and SAIFI decreased by 17% each. Improved performance in this area is primarily driven by continued targeted replacement of cable sections that have the greatest impact on reliability. In 2022, there was a 25% reduction in number of failures in mainline sections as compared to 2021, which has led to significant improvements in the SAIDI and SAIFI indices.

The cable injection program, which extends the life of age cable, resumed in 2022. Last year, we injected a total 80,201 circuit feet of cable and replaced 232,090 circuit feet. Our 2023 work plan calls for injecting 100,000 circuit feet of cable and replacing 240,000 circuit feet.

5) Recommendation

It is recommended that the Board accept the Monitoring Report for SD-4, Reliability.

6) Appendices

Appendix 1: Generation Supplementary Information

Hydro Generation Facilities

Major hydro generation maintenance and construction activities include:

- Recoating of the Ice House Gates per requirements from FERC Part 12D inspections
- Ice House and Union Valley Spillway subsurface investigations were completed as required by FERC Part 12D inspections
- Procured a contractor for the FERC Part 12D comprehensive assessment for 6 dams to be completed in 2023
- Investigation conducted on options for Pump Back Hydro Storage at Union Valley to Junction Reservoir
- Underground conduit from Jones Fork Intake to the Ice House Low Level Outlet in preparation for pulling at 4kV power line as part of fire risk mitigation
- Robbs Peak Transformer dissolved gas analysis (DGA) continuous monitoring installation completed
- Robbs Peak Transformer bushing replacement completed
- Loon Lake Transformer bushing replacement completed and oil processed
- Camino unit 1 controls upgrade completed
- Jaybird unit 2 controls pre-work completed

Gas Pipeline Operations

Capital improvements and major maintenance activities include:

- Line 700A Yolo Causeway erosion mitigation
- Winters M&R Station insulating gasket replacement
- Procter & Gamble M&R Station concrete pipe support replacement
- Line 700B 28th Street depth of cover verification
- Pipeline cyclic fatigue engineering study
- Carson M&R station CO2 digester (biofuel) gas piping analysis using guided wave ultrasonics inspection
- Pipeline class location study
- Line 700B inspection dig at Meadowview Road
- Line 700B cathodic protection monitoring station installations at Fruitridge Road and Stockton Boulevard, and Fruitridge Road and 66th Street
- Nineteen as-built drawing update projects

Thermal Generation Facilities

Major thermal generation maintenance and construction activities completed include:

Carson Power Plant:

- The plant completed a hot section Overhaul on the combustion turbine generator unit 1.

Procter & Gamble Power Plant:

- Replaced selective catalytic reduction (SCR) system catalyst

Campbell Power Plant & McClellan Power Plant:

- Completed initial Zero Carbon Plan Conditional Availability Study for both Campbell Power Plant & McClellan Power Plant.

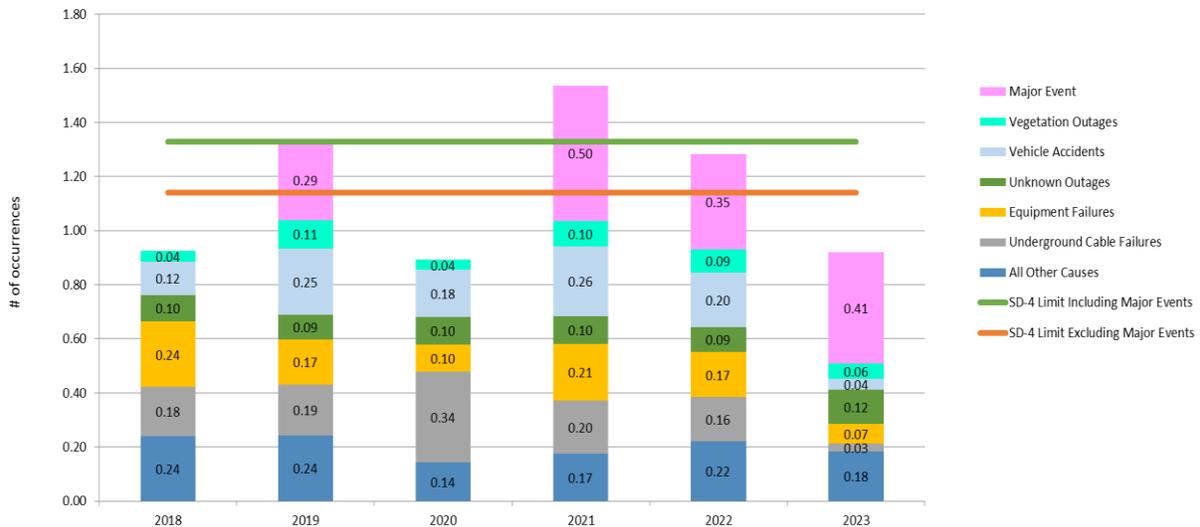
Cosumnes Power Plant:

- The plant completed an extensive overhaul, which lasted 88 days, including
 - Access Platform Improvements
 - DCS Control-Upgrade MK VIe & DCS Instrumentation
 - CT Rotor LTEs (CT3, CT2 w/Spare)
 - Steam Turbine – row L0 blade replacement
 - Steam Distribution-High Pressure Bypass Replacement
 - Maximum Allowable Working Pressure (MAWP) Increase
 - Unit 3 Hot Reheat Bypass Replacement
 - CT3 and CT2 Major Inspections
 - CT Hardware CA & Repair
 - LS2100/EX2100 Upgrade
 - Heat Recovery Steam Generator (HRSG) flash tanks replacement
 - Boiler Feed Water (BFW) pumps overhaul
- STG Generator Stator Repair

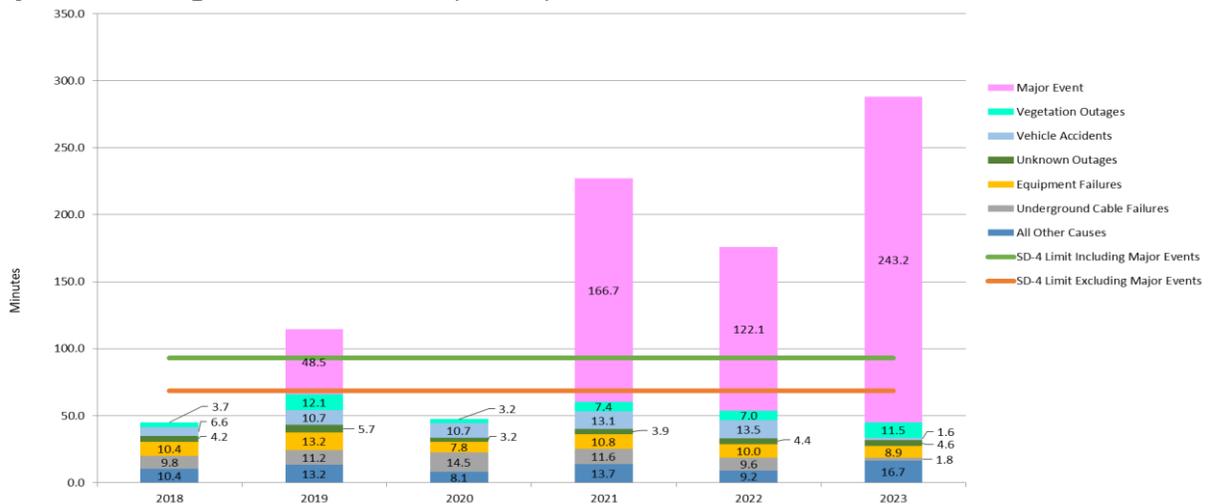
Appendix 2: Graphs

The graphs below provide a five-year comparison of the impacts of outage causes to the average frequency (SAIFI) and duration (SAIDI) of outages. 2023 SAIDI and SAIFI are year-to-date through Apr. 30, 2023.

Graph 1: Multi-Year Comparison
System Average Frequency Index (SAIFI)



Graph 2: Multi-Year Comparison
System Average Duration Index (SAIDI)



Appendix 3: Reliability Comparison

Table 3 below provides a comparison between SMUD's average distribution system performance compared to that of Pacific Gas and Electric's (PG&E)'s distribution

system. PG&E defines its distribution system as operating voltages less than 60kV and uses IEEE 1366 standards to define major event days, while SMUD includes the 69kV operating voltage as part of the distribution system and uses an alternate method to determine major event days. The information regarding PG&E’s system average performance was obtained from the 2020 reliability report posted on the California Public Utilities Commission (CPUC) website. PG&E’s 2021 or 2022 Reliability Reports are not posted on the CPUC website yet.

Table 3: Distribution System Reliability Comparison (excluding major events)

Year	SAIDI (minutes)		SAIFI	
	SMUD	PG&E	SMUD	PG&E
2018	44.7	90.7	0.80	0.84
2019	66.0	103.1	1.04	0.88
2020	47.6	111.2	0.90	0.93
2021	60.4	N/A	1.04	N/A
2022	53.7	N/A	0.93	N/A
Notes: 1. Listed SAIFI and SAIDI numbers are based on outages greater than 5 minutes (CPUC criteria).				

Appendix 4: Year-to-Date 2023 Reliability Update

Table 4: 2023 Year-to-Date Distribution System Reliability Performance

	Excluding Major Events			Including Major Events		
	SD-4 Limit	Jan.1 – Apr. 30, 2023	2023 YE Projection	SD-4 Limit	Jan.1 – Apr. 30, 2023	2023 YE Projection
SAIFI	1.14	0.51	1.15	1.33	0.92	1.75
SAIDI (minutes)	68.7	45.0	78.4	93.3	288.2	369.0

The year-end forecast exceeds the SD-4 limits primarily due to the impacts of the series of atmospheric river winter storms that occurred during the first quarter of 2023.

RESOLUTION NO. _____

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

This Board accepts the monitoring report for **Strategic Direction SD-4, Reliability**, substantially in the form set forth in **Attachment ____** hereto and made a part hereof.

SSS No. LEG 2023-0067

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date Policy – 06/07/23
Board Meeting Date June 15, 2023

TO	TO
1. Jennifer Davidson	6.
2.	7.
3.	8.
4.	9. Legal
5.	10. CEO & General Manager

Consent Calendar	<input checked="" type="checkbox"/>	Yes		No <i>If no, schedule a dry run presentation.</i>	Budgeted	<input checked="" type="checkbox"/>	Yes		No <i>(If no, explain in Cost/Budgeted section.)</i>
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FROM (IPR) Laura Lewis	DEPARTMENT Executive Office	MAIL STOP B308	EXT. 6123	DATE SENT 06/08/23
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NARRATIVE:

Requested Action: Approve proposed revisions to **Board-Staff Linkage BL-8, Delegation to the Chief Executive Officer and General Manager with Respect to Procurement.**

Summary: At the June 7, 2023, Policy Committee, staff provided the Board an overview of recommendations to revise Board Staff Linkage BL-8. Recommendations are to raise the procurement limit amount delegated to the CEO & GM, add a “Supplier Code of Conduct,” and grant SMUD staff the ability to leverage procurement agreements from other publicly solicited contracts. The Board requested the item be placed on the Consent Calendar for June 15, 2023. Redlined and clean (redlines accepted) of the proposed revisions are attached.

Board Policy: Board-Staff Linkage BL-8, Delegation to the Chief Executive Officer and General Manager with Respect to Procurement
(Number & Title)

Benefits: Updates delegation limits to reflect increased costs due to inflation to enable business efficiency through increased contract award limit delegations while maintaining prudent decision making and risk mitigation through SMUD’s procurement process.

Cost/Budgeted: No costs are associated with this action.

Alternatives: Make no revisions to BL-8 or make different revisions.

Affected Parties: All SMUD Departments and Contractors

Coordination: Board Office, Executive Office, Procurement, and Legal

Presenter: Casey Fallon, Director, Procurement, Warehouse & Fleet

Additional Links:

SUBJECT Proposed Revisions to Board-Staff Linkage BL-8, Delegation to the CEO/GM with Respect to Procurement	ITEM NO. (FOR LEGAL USE ONLY) <b style="font-size: 24px; color: blue;">7
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SMUD BOARD POLICY	
Category: Board-Staff Linkage	Title: Delegation to the Chief Executive Officer and General Manager with Respect to Procurement
	Policy Number: BL-8
Date of Adoption: August 21, 2003	Resolution No. 03-08-07
Revision: October 16, 2003	Resolution No. 03-10-14
Revision: June 3, 2004	Resolution No. 04-06-04
Revision: October 16, 2008	Resolution No. 08-10-09
Revision: October 1, 2009	Resolution No. 09-10-05
Revision: August 4, 2011	Resolution No. 11-08-04
Revision: November 17, 2011	Resolution No. 11-11-06
Revision: March 15, 2012	Resolution No. 12-03-13
Revision: August 21, 2014	Resolution No. 14-08-03
Revision: December 15, 2016	Resolution No. 16-12-18
Revision: July 16, 2020	Resolution No. 20-07-05
Revision: March 18, 2021	Resolution No. 21-03-04
<u>Revision: _____, 2023</u>	<u>Resolution No. ##-##-##</u>

The procurement of goods and services is an integral part of SMUD operations. SMUD’s procurement activities shall take place in accordance with the following principles:

- a) **Competition:** SMUD’s procurement activities shall be competitive whenever practical.

- b) **Direct Procurement:** Direct procurement may be utilized when it is in SMUD's best interest. Direct procurement is the purchase of goods or services without competition when multiple sources of supply are available.
- c) **Sole Source Procurement:** Sole source procurement shall be performed only in the case of emergency or when a competitive process would be an idle act.
- d) **Inclusiveness:** SMUD's procurement practices shall promote inclusiveness of the entire supplier community in its contracting opportunities.
- e) **Economic Development:** SMUD's procurement practices shall promote the economic development of the community we serve.
- f) **Environmental Procurement:** SMUD shall minimize the impact on the environment through its procurement practices. In making procurement decisions, staff shall consider the environmental impacts in assessing total cost and benefits.
- g) **Responsible Bidder:** SMUD shall only do business with reputable and responsible suppliers. A Responsible Bidder demonstrates trustworthiness, quality, capacity, financial capability, fair labor practices, and experience to satisfactorily perform SMUD work through the bidding and evaluation process. In addition, SMUD will determine Responsible Bidders by considering a supplier's social, environmental ethical, and safety accountability where applicable.
- h) **Supplier Code of Conduct:** SMUD shall set minimum expectations or standards for all suppliers to follow in the course of doing business with SMUD (in some cases by submitting data and reporting annually) including but not limited to, labor and human rights, environmental, social, governance (ESG), health and safety accountability, ethics and compliance, and diversity, equity, inclusion, and belonging practices.
- i) **Best Value Procurement:** SMUD may procure goods and services by the best value at the lowest cost methodology, where cost and other factors are used to obtain the maximum value while ensuring a fair and equitable process.
- j) **Leveraged Procurement Agreement (LPA):** SMUD may procure goods and services where another lead public agency or organization competitively procures the same goods or services under applicable state and federal laws to streamline procurement processes and leverage collective buying power of multiple agencies to achieve cost savings and other benefits to SMUD. Leveraged procurement agreements are generally referred to by other public agencies as "Cooperative Purchasing Agreements".
- k) **Strategic Alliances:** SMUD may enter into strategic alliance contracts for the procurement of goods or services. A Strategic Alliance is a competitively bid multi-year contract for goods and/or services in which the Supplier and SMUD

work collaboratively over the life of the contract to improve quality, and to explore design and process improvements to reduce the cost of production, service delivery, and the total cost of ownership. These benefits are shared both by SMUD and the Supplier.

~~j)~~ **Supply Chain Risk:** SMUD’s procurement activities shall identify, manage, and mitigate supply chain risks through a coordinated effort across the enterprise.

~~m)~~ ~~k)~~ **Protest Policy:** SMUD shall ensure that suppliers are afforded the opportunity to have their grievances heard through a fair protest process.

~~n)~~ ~~l)~~ **Delegation of Authority to the Chief Executive Officer and General Manager:** The Chief Executive Officer and General Manager is delegated authority to perform and approve the procurement activities in accordance with the below matrix. This delegation includes the authority to amend contracts for time extensions or other changes that create no additional cost to SMUD.

<u>Category</u>	<u>Amount*</u>
Competitive Awards:	
Operational Inventory	\$8 <u>11</u> million
Non-inventory Materials	\$8 <u>11</u> million
Construction and Maintenance Services	\$8 <u>11</u> million
Information Technology	\$8 <u>11</u> million
Professional and Consulting Services	\$2 <u>3</u> million
Rents and Leases	\$1 million
Sole Source:	
All types except Maintenance/Licensing Fees	\$ 1 <u>5</u> million
Maintenance/Licensing Fees	\$3 million or original approved amount
Direct Procurement:	
Materials/Supplies/Services	\$ 50 <u>k</u> **
Government Entities	\$1 million
Nonprofit Entities (services/goods)	\$1 million
Emergency Procurements:	
All types	\$2 million
Nonprofit Entities:	
Memberships/Project Participation Agreement	\$3 million

Contingencies:

Board Awarded Contracts

Up to 10% of contract
award

***The amounts for all categories except Direct Procurement Materials/Supplies/Services shall be adjusted automatically on an annual basis beginning Jan 1, 2024, consistent with the U.S. Bureau of Labor Statistics (BLS) published national consumer price index (CPI) per the Federal Reserve Bank of Minneapolis Average Annual CPI calculator.**

****The amount shall be adjusted automatically on an annual basis pursuant to the implicit price deflator as set forth in California Public Utilities Code section 12751, using the base year of 1997.**

**Monitoring Method: GM Report
Frequency: Quarterly**

SMUD BOARD POLICY	
Category: Board-Staff Linkage	Title: Delegation to the Chief Executive Officer and General Manager with Respect to Procurement
	Policy Number: BL-8
Date of Adoption: August 21, 2003	Resolution No. 03-08-07
Revision: October 16, 2003	Resolution No. 03-10-14
Revision: June 3, 2004	Resolution No. 04-06-04
Revision: October 16, 2008	Resolution No. 08-10-09
Revision: October 1, 2009	Resolution No. 09-10-05
Revision: August 4, 2011	Resolution No. 11-08-04
Revision: November 17, 2011	Resolution No. 11-11-06
Revision: March 15, 2012	Resolution No. 12-03-13
Revision: August 21, 2014	Resolution No. 14-08-03
Revision: December 15, 2016	Resolution No. 16-12-18
Revision: July 16, 2020	Resolution No. 20-07-05
Revision: March 18, 2021	Resolution No. 21-03-04
Revision: _____, 2023	Resolution No. ##-##-##

The procurement of goods and services is an integral part of SMUD operations. SMUD’s procurement activities shall take place in accordance with the following principles:

- a) **Competition:** SMUD’s procurement activities shall be competitive whenever practical.

- b) **Direct Procurement:** Direct procurement may be utilized when it is in SMUD's best interest. Direct procurement is the purchase of goods or services without competition when multiple sources of supply are available.
- c) **Sole Source Procurement:** Sole source procurement shall be performed only in the case of emergency or when a competitive process would be an idle act.
- d) **Inclusiveness:** SMUD's procurement practices shall promote inclusiveness of the entire supplier community in its contracting opportunities.
- e) **Economic Development:** SMUD's procurement practices shall promote the economic development of the community we serve.
- f) **Environmental Procurement:** SMUD shall minimize the impact on the environment through its procurement practices. In making procurement decisions, staff shall consider the environmental impacts in assessing total cost and benefits.
- g) **Responsible Bidder:** SMUD shall only do business with reputable and responsible suppliers. A Responsible Bidder demonstrates trustworthiness, quality, capacity, financial capability, fair labor practices, and experience to satisfactorily perform SMUD work through the bidding and evaluation process. In addition, SMUD will determine Responsible Bidders by considering a supplier's social, environmental ethical, and safety accountability where applicable.
- h) **Supplier Code of Conduct:** SMUD shall set minimum expectations or standards for all suppliers to follow in the course of doing business with SMUD (in some cases by submitting data and reporting annually) including but not limited to, labor and human rights, environmental, social, governance (ESG), health and safety accountability, ethics and compliance, and diversity, equity, inclusion, and belonging practices.
- i) **Best Value Procurement:** SMUD may procure goods and services by the best value at the lowest cost methodology, where cost and other factors are used to obtain the maximum value while ensuring a fair and equitable process.
- j) **Leveraged Procurement Agreement (LPA):** SMUD may procure goods and services where another lead public agency or organization competitively procures the same goods or services under applicable state and federal laws to streamline procurement processes and leverage collective buying power of multiple agencies to achieve cost savings and other benefits to SMUD. Leveraged procurement agreements are generally referred to by other public agencies as "Cooperative Purchasing Agreements".
- k) **Strategic Alliances:** SMUD may enter into strategic alliance contracts for the procurement of goods or services. A Strategic Alliance is a competitively bid multi-year contract for goods and/or services in which the Supplier and SMUD work collaboratively over the life of the contract to improve quality, and to explore

design and process improvements to reduce the cost of production, service delivery, and the total cost of ownership. These benefits are shared both by SMUD and the Supplier.

- l) **Supply Chain Risk:** SMUD’s procurement activities shall identify, manage, and mitigate supply chain risks through a coordinated effort across the enterprise.
- m) **Protest Policy:** SMUD shall ensure that suppliers are afforded the opportunity to have their grievances heard through a fair protest process.
- n) **Delegation of Authority to the Chief Executive Officer and General Manager:** The Chief Executive Officer and General Manager is delegated authority to perform and approve the procurement activities in accordance with the below matrix. This delegation includes the authority to amend contracts for time extensions or other changes that create no additional cost to SMUD.

<u>Category</u>	<u>Amount*</u>
Competitive Awards:	
Operational Inventory	\$11 million
Non-inventory Materials	\$11 million
Construction and Maintenance Services	\$11 million
Information Technology	\$11 million
Professional and Consulting Services	\$3 million
Rents and Leases	\$1 million
Sole Source:	
All types except Maintenance/Licensing Fees	\$1.5 million
Maintenance/Licensing Fees	\$3 million or original approved amount
Direct Procurement:	
Materials/Supplies/Services	\$50k**
Government Entities	\$1 million
Nonprofit Entities (services/goods)	\$1 million
Emergency Procurements:	
All types	\$2 million
Nonprofit Entities:	
Memberships/Project Participation Agreement	\$3 million
Contingencies:	
Board Awarded Contracts	Up to 10% of contract award

***The amounts for all categories except Direct Procurement Materials/Supplies/Services shall be adjusted automatically on an annual basis beginning Jan 1, 2024, consistent with the U.S. Bureau of Labor Statistics (BLS) published national consumer price index (CPI) per the Federal Reserve Bank of Minneapolis Average Annual CPI calculator.**

****The amount shall be adjusted automatically on an annual basis pursuant to the implicit price deflator as set forth in California Public Utilities Code section 12751, using the base year of 1997.**

**Monitoring Method: GM Report
Frequency: Quarterly**

DRAFT

RESOLUTION NO. _____

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

This Board approves the revisions to the **Board-Staff Linkage BL-8, Delegation to the Chief Executive Officer and General Manager with Respect to Procurement** substantially in the form as set forth in **Attachment ____**.

SSS No.

DP&O 23-006

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date ERCS - June 14, 2023
Board Meeting Date June 15, 2023

TO	TO
1. Maria Veloso Koenig	6.
2. Frankie McDermott	7.
3. Suresh Kotha	8.
4. Brandy Bolden	9. Legal
5. Lora Anguay	10. CEO & General Manager

Consent Calendar	x	Yes	No <i>If no, schedule a dry run presentation.</i>	Budgeted	x	Yes	No <i>(If no, explain in Cost/Budgeted section.)</i>	
FROM (IPR)			DEPARTMENT	MAIL STOP			EXT.	DATE SENT
Maria Veloso Koenig			Distribution Planning & Operations	EA403			5794	05/19/2023

NARRATIVE:

Requested Action: Adopt SMUD’s 2023-2025 Wildfire Mitigation Plan.

Summary: Senate Bill 901 (2018) and Assembly Bill 1054 (2019) revised Public Utilities Code section 8387 to require that before January 1, 2020, and annually thereafter, every publicly owned electric utility prepare a wildfire mitigation plan (WMP), present it in a noticed public meeting, and accept comments. Section 8387 also requires that the utility contract with a qualified independent evaluator experienced in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of the utility’s WMP. The evaluator shall issue a report and present the report at a public meeting. On or before July 1 of each year publicly owned electric utilities must submit their approved WMPs to the California Wildfire Safety Advisory Board (WSAB) for review, comment and advisory opinion. At least once every three years, the submission shall be a comprehensive revision of the plan.

By Resolution No. 19-10-09, the Board adopted SMUD’s initial Wildfire Mitigation Plan and authorized the Chief Executive Officer and General Manager to make future changes to the WMP that further the primary purpose of the WMP and provide a net benefit to SMUD. By Resolution Nos. 20-11-04, 21-06-02, and 22-05-05 in each year following, the Board adopted SMUD’s annual WMP update. The WSAB issued an advisory opinion for the 2023 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electric Cooperatives, commending SMUD for an “exemplary description of comprehensive wildfire mitigation strategies in their 2022 WMP.”

In accordance with Section 8387, SMUD staff has completed its triennial comprehensive review and update of SMUD’s WMP. The 2023-2025 WMP provides an update on SMUD’s wildfire prevention and mitigation metrics and strategies. The draft 2023-2025 WMP was offered for public comment and assessed by a qualified independent evaluator, Guidehouse. The 2023-2025 WMP and Guidehouse report will be presented to the Board at the duly noticed ERCS Committee meeting on June 14, 2023.

Board Policy: SD-4, Reliability; SD-6, Safety Leadership; SD-15, Outreach and Communication; SD-17, Enterprise Risk Management
(Number & Title)

Benefits: The WMP Update is in alignment with Strategic Direction SD-4, Reliability, that SMUD will maintain the electric system in good repair, and SD-6, that SMUD will implement measures to protect the public from injuries related to SMUD operations or facilities. Additionally, this item is consistent with Strategic Direction SD-15, Outreach and Communication, that SMUD will ensure all groups are aware of SMUD’s major decisions and programs. This item is consistent with SD-17, Enterprise Risk Management, in maintaining an integrated enterprise risk management process.

Cost/Budgeted: The programs outlined in the WMP are budgeted in separate processes by the sponsoring departments.

Alternatives: California law requires the WMP and evaluator’s report to be presented to the Board in a noticed public meeting.

Affected Parties: Transmission Planning & Operations, Distribution Planning & Operations, Line Assets, Power Generation, Customer Experience Delivery, Marketing and Corporate Communications, Customer Operations & Community Energy Services, Environmental and Real Estate Services, Facility and Security Operations, Information Technology, Procurement, Warehouse and Fleet, People Services & Strategies, Treasury and Risk Management, Legal and Government Affairs, Board Office

Coordination: Transmission Planning & Operations, Distribution Planning & Operations, Line Assets, Power Generation, Customer Experience Delivery, Marketing and Corporate Communications, Customer Operations & Community Energy Services, Environmental and Real Estate Services, Facility and Security Operations, Information Technology, Procurement, Warehouse and Fleet, People Services & Strategies, Treasury, Government Affairs and Risk Management, Legal and Government Affairs, Board Office

Presenter: Maria Veloso Koenig, Director Distribution Planning and Operations

Additional Links:

SUBJECT

2023-2025 Wildfire Mitigation Plan

ITEM NO. (FOR LEGAL USE ONLY)

8

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

DRAFT

2023 - 2025

Wildfire Mitigation Plan

Powering forward.
Together.



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1 Executive Summary

SMUD's Wildfire Mitigation Plan continues to build on our success implementing best practices and lessons learned from prior revisions and reflects the continued progress we made on risk reduction projects and programs.

SMUD's service area is outside of CPUC's High Fire Threat District's (HFTD) Tier 2 and Tier 3 areas. SMUD does own and operate transmission lines and hydro power plants located in Eldorado County, which is within HFTD Tier 2 and Tier 3. The bulk of SMUD's efforts are focused on reducing fuel around our facilities and the potential of ignitions to reduce ignition risk.

One project that was completed in 2022 designed to reduce ignition risk was the undergrounding of three miles of 4kV distribution lines in Tiers 2 and 3 that ran between hydro facilities. Several overhead spans remain, one of which was upgraded to tree-wire, and remaining spans underbuilt on 69kV structures over rocky terrain. Undergrounding the lines resulted in elimination of ignition risk from vegetation, animals and other objects contacting these lines.

Climate change has resulted in California experiencing some of the most severe drought conditions in the past few years. The lack of rain and snow enabled SMUD to achieve better than projected progress in the UARP fuels reduction project. Contracted tree crews covered significant ground in removing trees, shrubs, and thinning operations. The project aims to remove fuels below, and up to 200 feet from either side of the transmission lines in the UARP. This progress will allow SMUD to complete the project well ahead of schedule.

SMUD continues to search out new technologies aimed at reducing ignition risk. One example is the use of drone ariel photography that provided better than expected results. High-resolution aerial photography with desktop inspections helped identify many equipment issues which would not normally have been caught during normal visual inspections. A total of 465 transmission structures were photographed and inspected with this new technology. Repairs were promptly scheduled and performed as needed. This project reduced the risk of conductor, hardware and structure failure which could possibly result in ignition. Another new technology we leveraged is x-ray of conductor splices. The x-ray technology allowed SMUD to reinforce splices that showed internal corrosion, which would result in potential splice failure resulting in conductors falling to the ground. A total of seven splices were reinforced.

Although SMUD service territory is primarily in the CPUC Tier 1, SMUD has been installing Cal FIRE exempt arrestors, connectors, and fuses in the Pole Clearing Area (PCA). The project was extended due to impacts of COVID-19 and is on track for completion by 2025. SMUD was able to offset the costs of the project's final three years due to a FEMA grant, which is a big win for SMUD customers.

COVID-19 brought unanticipated challenges to mitigation efforts. Supply chain and contractor availability disruptions impacted every utility, including SMUD. Material delivery lead times increased dramatically for many items, resulting in delays to project completion. SMUD staff worked directly with vendors and suppliers to obtain materials and better handle lead times and priority deliveries. Progress was delayed but continues on revised schedules.

As part of the comprehensive review, SMUD staff performed a risk analysis using the bow-tie approach. The risk analysis included discussions of risk reductions due to project completions in the UARP and PCA. Impacts of climate change, drought and summer heat storms were also discussed.

The various programs and projects described in this WMP provide a comprehensive and innovative approach to SMUD's wildfire risk reduction.

2 Introduction

Over the last several years California has seen some of its most devastating and destructive wildfires. Climate change impacts, including warmer days and nights, longer heat events, drought, and changes in precipitation patterns, are recognized to be large contributing factors. The expansion of the wildland-urban interface, historical development patterns and land management practices are factors as well. These realities require utilities to develop a new way of thinking about wildfire mitigation planning.

In response, Senate Bill (SB) 901 authored by Senator Dodd, enacted in 2018. SB 901 requires all electric utilities to prepare a wildfire mitigation plan (WMP).

SB 901 amended Public Utilities Code (PUC) section 8387. Assembly Bill (AB) 1054 (Holden, 2019) further amended this statute. Section 8387 generally requires every publicly owned utility to construct, maintain and operate its electrical facilities to minimize the risk of wildfire posed by those facilities. As amended by SB 901 and AB 1054, section 8387 more specifically requires every publicly owned utility to prepare a WMP and update it annually, with a comprehensive revision of the WMP no less than every three years.

WMPs must include vegetation management (VM) programs, inspection and maintenance programs, protocols for deactivating automatic reclosers and for de-energizing power lines during severe weather conditions in high fire threat areas. The plan is required to identify priority customers, such as first responders and local agencies, health care providers, water and telecommunication facilities, groups that assist children, elderly, mobility impaired and other vulnerable populations and include communication programs for those customers. The plans need to describe how service will be restored after a wildfire and include processes for (i) measuring the performance of the plan, (ii) identifying and correcting any deficiencies in the plan and (iii) auditing implementation of the plan.

The Sacramento Municipal Utility District (SMUD) Board of Directors adopted the initial WMP on October 17, 2019. Updates were adopted annually. This is SMUD's comprehensive triennial update.

2.1 Utility overview and context

Table 1 provides summary information to highlight SMUD's unique characteristics impacting its low wildfire risk. This information changes minimally each year and is refreshed, at a minimum, with SMUD's triennial comprehensive WMP review.

Table 1 Context Setting Information

Utility Name	SMUD	
Service Territory Size	900 square miles	
Owned Assets	X Transmission X Distribution X Generation	
Number of Customers Served	Approximately 648,000 customer accounts	
Population Within Service Territory	Approximately 1.5 million people	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
Service Territory Location/Topography ¹	25.8% Agriculture 0.1% Barren/Other 0% Conifer Forest 0% Conifer Woodland 0% Desert 0.3% Hardwood Forest 3.9% Hardwood Woodland 29.5% Herbaceous 0.1% Shrub 37.9% Urban 2.3% Water	
Service Territory Wildland Urban Interface ² (based on total area)	6.3% Wildland Urban Interface; 9.1% Wildland Urban Intermix;	
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	<input type="checkbox"/> Includes maps Tier 2: 0% Tier 3: 0% SMUD operates its Upper American River Project outside its territory within the High Fire Threat District	
Prevailing Wind Directions & Speeds by Season	<input type="checkbox"/> Includes maps CalFire provides the following description in its 2021 Strategic Fire Plan Amador-El Dorado Unit (AEU): “Fire weather for AEU is typically dominated by three general weather phenomena; the delta push influence, north wind events, and east foehn winds caused by high pressure development in the Great Basin. All three weather conditions cause potential increases in fire intensity and size. The delta influence is the most common and surfaces frequently throughout summer. Typically, high pressure systems will dominate Northern California in the summer months bringing extremely hot and dry conditions <i>over</i> much of the region. As these systems develop, they will tend to yield near the Delta and Sacramento areas bringing the marine influence to the Unit. This is generally considered a good thing for fire behavior; slightly cooler afternoon temperatures and increases in relative humidity. The downside is the strong winds that typically accompany these patterns can override any benefit that	

¹ This data is based on the California Department of Forestry and Fire Protection, California Multi-Source Vegetation Layer Map, depicting WHR13 Types (Wildlife Habitat Relationship classes grouped into 13 major land cover types) available at: <https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3>.

² This data is based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in *The 2010 Wildland-Urban Interface of the Conterminous United States*, available at https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf.

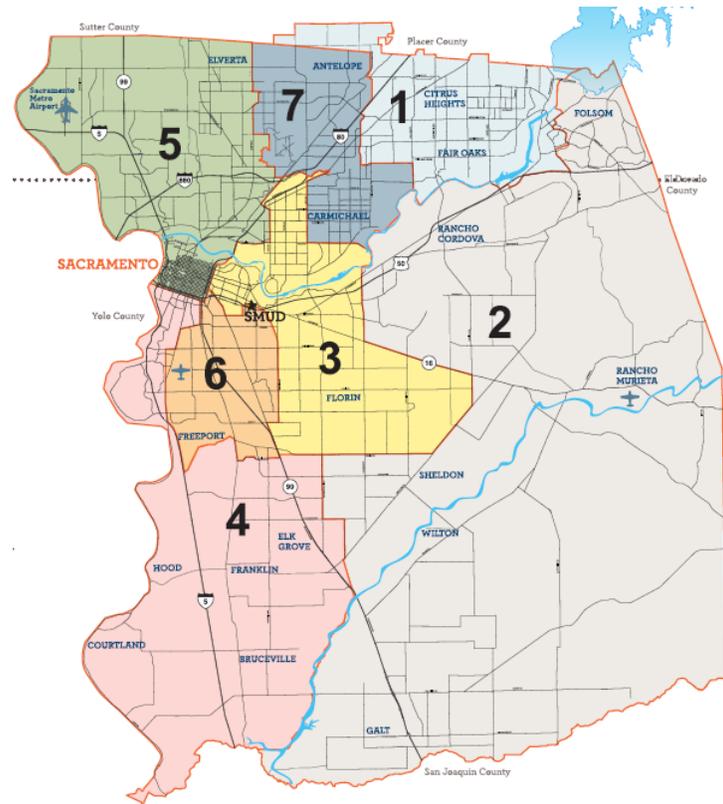
Utility Name	SMUD
Miles of Owned Lines Underground and/or Overhead	Overhead Dist: 3,868 miles Overhead Trans: 469 miles Underground Dist: 6,819.5 miles Underground Trans: 17.3 miles Explanatory Note 2 – Description of Unique Ownership Circumstances: None
Percent of Owned Lines in CPUC High Fire Threat Districts	<p style="text-align: center;"><i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i></p> <p style="text-align: center;"><i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i></p>
Customers have ever lost service due to an IOU PSPS event?	
Customers have ever been notified of a potential loss of service due to a forecasted IOU PSPS event?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has developed protocols to pre emptively shut off electricity in response to elevated wildfire risks?	
Has previously pre emptively shut off electricity in response to elevated wildfire risk?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, then provide the following data for calendar year 2022: <i>Number of shut-off events: 0</i> <i>Customer Accounts that lost service for >10 minutes: N/A</i> <i>For prior response, average duration before service restored: N/A</i>

Note: Data reflects year-end 2022

2.1.1 SMUD profile

Headquartered in Sacramento, California, SMUD owns and operates an electric system that has provided retail electric service since 1946. SMUD generates, transmits, and distributes electricity within a 900-square-mile territory that includes the principal parts of Sacramento County, and a small adjoining portion of Placer County (see Figure 1).

Figure 1 Map of SMUD's service area



As a publicly owned utility, SMUD is governed by a seven-member popularly elected Board of Directors that determines policy and appoints the Chief Executive Officer and General Manager who is responsible for SMUD's overall management and operations. Today, SMUD's power supply is on average about 50 percent carbon free and SMUD has a goal to reach zero carbon in its electricity production by 2030. SMUD is one of the largest community-owned electric utilities in the nation, recognized internationally for its innovative energy efficiency programs and use of renewable power technologies.

SMUD owns, operates, and has ownership interests that are critical to maintaining the flow of power from generating facilities through the transmission lines to SMUD's service area. These assets are in the geographic areas of Sacramento, El Dorado, Solano, and Placer Counties.

2.1.2 The service area

SMUD is the primary electric distribution service provider within an area of approximately 900 square miles in central California, serving a population of approximately 1.5 million. The service area includes Sacramento, the State Capital, and the populous areas principally to the northeast and south of the City of Sacramento and the agricultural areas to the north and south.

2.1.3 The distribution and transmission system, Sacramento County

SMUD owns and operates a vertically integrated electric system that includes generation, transmission, and distribution facilities.

SMUD supplies power to its bulk power substations through 230 kilovolt (kV) and 115 kV transmission systems. This system transmits power from SMUD's generation plants and interconnects with Pacific Gas & Electric Company (PG&E) and the Western Area Power Administration (WAPA). Power is distributed throughout Sacramento County via a 69 kV sub-transmission system except for the city of Sacramento downtown area, which is served from the 115 kV transmission systems. The downtown area is served from 115/12 kV and 115/21 kV substations. The distribution system serving the remainder of SMUD's service territory is comprised of 69/12 kV and 69 kV substations with overhead and underground distribution circuits.

SMUD's record peak load of 3,299 MW occurred on July 24, 2006. Current and historical load statistics can be found at our website: <https://www.smud.org/en/Corporate/About-us/Company-Information/Reports-and-Statements>

2.1.4 The hydroelectric system in the UARP, Eldorado County

SMUD owns and operates ten hydroelectric powerhouses rated at approximately 700MW in the Western Sierra Nevada Mountain region. The hydroelectric system spans approximately 50 miles with the highest elevation reservoir at Loon Lake and descends the mountain range terminating at Chili Bar reservoir. Eight hydroelectric powerhouses are interconnected with dedicated 69kV and 230kV transmission lines. The most recent additions are two small hydroelectric powerhouses, which interconnect directly into PG&E's 12kV and 21kV local distribution systems. Approximately twenty linear miles of overhead 230kV transmission lines connect the hydroelectric system to SMUD's service area near Folsom.

The hydroelectric powerhouses are fed from the various man-made reservoirs in the area. A small dedicated 4kV distribution system serves various valve and gate control houses for the reservoirs, a ranger station, a lift chalet, and a communication station. The 4kV distribution system is approximately five circuit miles in length. The 4kV system is not interconnected with PG&E's distribution system that serves the area.

2.1.5 The wind power collector system in the Delta, Solano County

SMUD owns and operates a 358MW wind project, located in Solano County, known as The Solano Wind Project. The project consists of 162 wind turbine generators (WTG) spanning five miles southwest of Rio Vista. Energy from the project is collected at 21kV and 35kV and transmitted over a dedicated overhead and underground system to Russell substation. At Russell substation, the energy is stepped up to 230 kV and interconnected to PG&E's Birds Landing Switching Station.

2.2 Policy statement

SMUD's overarching goal is to provide safe, reliable, environmentally sustainable, and affordable electric service to its local community. To meet this goal, SMUD constructs, maintains, and operates its electric system in a manner that minimizes any risk of catastrophic wildfire posed by its electrical lines and equipment.

2.3 Purpose

This WMP describes the range of activities that SMUD is taking to mitigate and reduce the threat of powerline-ignited wildfires, including its various programs, policies, and procedures. This plan is subject to direct supervision by SMUD's Board of Directors and primary responsibility for its implementation resides with the Chief Operating Officer (COO).

This plan meets or exceeds the requirements of PUC section 8387 for publicly owned electric utilities to prepare a WMP. Table 2 references relevant sections in this document that address each PUC requirement.

Table 2 Plan compliance with Public Utilities Code 8387(b)

PUC 8387 Requirement	Description	Plan Section Number
b (2) (A)	An accounting of the responsibilities of persons responsible for executing the plan.	2.5
b (2) (B)	The objectives of the wildfire mitigation plan.	2.4
b (2) (C)	A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	3
b (2) (D)	A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.	9.1
b (2) (E)	A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	9.1.1
b (2) (F)	Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	6.1.1, 7.2
b (2) (G)	Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities and operators of telecommunications infrastructure. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications infrastructure with premises within the footprint of potential deenergization for a given event.	7.1, 7.2
b (2) (H)	Plans for vegetation management.	6.4
b (2) (I)	Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	6.3
b (2) (J)	A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to both of the following:	4.2
b (2) (J) (i)	Risks and risk drivers associated with design, construction, operation and maintenance of the local publicly owned electric utility's or electrical cooperative's equipment and facilities.	4.2
b (2) (J) (ii)	Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.	5.2
b (2) (K)	Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire threat district based on new information or changes to the environment.	5.2
b (2) (L)	A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.	4.2

PUC 8387 Requirement	Description	Plan Section Number
b (2) (M)	A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	8
b (2) (N)	A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following:	
b (2) (N) (i)	Monitor and audit the implementation of the wildfire mitigation plan.	9.2
b (2) (N) (ii)	Identify any deficiencies in the wildfire mitigation plan or its implementation and correct those deficiencies.	9.2.1
b (2) (N) (i5ii)	Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes or commission rules.	9.1.1
b (3)	The local publicly owned electric utility or electrical cooperative shall present each wildfire mitigation plan in an appropriately noticed public meeting. The local publicly owned electric utility or electrical cooperative shall accept comments on its wildfire mitigation plan from the public, other local and state agencies and interested parties, and shall verify that the wildfire mitigation plan complies with all applicable rules, regulations, and standards as appropriate.	2.6.2
	The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The independent evaluator shall issue a report that shall be made available on the internet web site of the local publicly owned electric utility or electrical cooperative and shall present the report at a public meeting of the local publicly owned electric utility's or electrical cooperative's governing board.	2.6.3

2.4 Objectives

The primary objectives of this WMP are to:

1. Minimize the probability that SMUD's transmission and distribution (T&D) system may be the origin or contributing source for the ignition of a wildfire;
2. Implement a wildfire mitigation plan that embraces safety, prevention, mitigation, and recovery as a central priority for SMUD; and
3. Create a WMP that is consistent with state law and objectives.

SMUD has evaluated prudent and cost-effective improvements to its physical assets, operations and training that will help meet these objectives.

The secondary objective of this WMP is to improve the resiliency of SMUD's line construction standards and practices. As part of developing this plan, SMUD assesses new industry practices and technologies that will reduce the likelihood of an interruption in service and improve restoration time in the event of a service interruption. In addition, SMUD reviews available fire investigation reports for fires throughout California to understand root causes that can be addressed.

This WMP outlines the actions SMUD is taking, including exploring new technologies, to reduce the risk of potential wildfire-causing ignitions associated with SMUD's electrical infrastructure, with the objective of enhancing public safety and improving grid reliability.

This WMP also outlines customer outreach and communication programs for customers that may be impacted in the unlikely event of a wildfire related de-energization. SMUD's long-standing and continued cooperation with local agencies are also outlined.

This WMP provides methodologies to measure the effectiveness of specific wildfire mitigation strategies and how those strategies measurably reduce the risk of catastrophic wildfire. Where a particular action, program component or protocol is determined to be unnecessary or ineffective, SMUD will assess whether a modification or replacement is merited. This plan will also help determine if more cost-effective measures would produce the same or improved results.

2.5 Accountability of the plan

SMUD's Chief Operating Officer has overall responsibility for the WMP. The Chief Operating Officer and Chief Customer Officer are responsible for executing the various components of the WMP.

2.5.1 SMUD operating unit responsibility specific to each component of the plan

Table 3 lists the Director with responsibility for the departments or workgroups that are accountable for the various components of SMUD's WMP. In each case the Director or the Director's designees will be responsible for the accuracy of, and for operations in accordance with, the specified component of the plan.

Table 3 Accountability for the WMP components.

Mitigation Activities	Responsible Department and Workgroup
Risk analysis	Director, Treasury Operations & Risk Management
Fire threat assessment in service area and UARP	Director, Distribution Planning & Operations
Wildfire prevention strategy and programs	
- Disable automatic reclosing - Planned de-energizations	Director, Transmission Planning & Operations, Director, Distribution Planning & Operations
	Director, Line Assets
- Substation visual inspections	Director, Substation, Telecom & Metering Assets
- Vegetation management - Pole clearing program	Director, Line Assets
Fire mitigation construction	
- Natural Ester-based fluid - Cal FIRE exempt equipment in PCA	Director, Distribution Planning & Operations
- Weather stations	Director, Transmission Planning & Operations
Enhancement projects	
Pilot projects	
- Light Detection and Ranging and Ortho Imagery	Director, Line Assets
Emergency preparedness	
- SMUD Emergency Operations Centers	Director, Facilities, Security & IPPS
- Public and agency communications for wildfires	Director, Customer Operations & Community Energy Services, Director, Customer Experience Delivery, Director, Corporate Communications

2.6 WMP Adoption and submittal

In 2019, SMUD conducted extensive stakeholder outreach during its preparation of the initial WMP. SMUD personnel met with local fire agencies and fire safe councils, Office of Emergency Services, and healthcare organizations. In addition, SMUD invited federal, state, and local agencies, representatives of utilities, telecommunication providers, and critical care customers to attend stakeholder outreach meetings where information regarding the preparation and contents of the WMP were provided.

From 2019 and annually thereafter, SMUD has and will continue to communicate with its community partners and stakeholders regarding its WMP reviews and updates. SMUD posts a public review draft of changes to the WMP on SMUD's website, smud.org/WildfireSafety. Notice of the public review draft is provided to the above stakeholders and published in local newspapers, including the Sacramento Bee and Mountain Democrat, on social media, and through electronic newsletter.

2.6.1 Public comment

A public review draft of changes to the WMP is posted on smud.org/WildfireSafety and made available to the public for comment for a period of at least 30 days after notification in local publications and social media. The public is provided instructions in how to submit comments on the posted web page.

Interested parties are also invited to comment on the plan at the time it is presented to SMUD's Board of Directors.

2.6.2 Board presentation

SMUD Board and Board Committee meetings are open and accessible to the public. Meeting notices and agendas are posted least 72 hours in advance at the SMUD office and on SMUD's website. Those who are unable to attend the meeting in-person can attend via zoom, livestream the meeting, or view a recording on SMUD's website. SMUD offers the opportunity for persons interested in wildfire related matters to sign up to receive notifications any time wildfire is being discussed at an upcoming Board or committee meeting at smud.org/WildfireSafety

Updates to the WMP are presented to and adopted by the Board at a noticed public meeting annually.

2.6.3 Independent evaluation

Although PUC 8387 does not require SMUD to retain a qualified independent evaluator (QIE) on an ongoing basis, we do as part of the comprehensive review process, and we find value in a review when substantial revisions to the WMP are made. In 2019 SMUD issued a public solicitation request, consistent with SMUD's procurement practices, to identify an experienced QIE to assess the comprehensiveness of SMUD's WMP. SMUD contracted with a QIE with experience in assessing the safe operation of electrical infrastructure. SMUD repeated this process in 2020 and again as part of its 2023 triennial comprehensive review and update process. SMUD also retained a QIE to assess its 2022 WMP.

Each QIE report was presented to SMUD's Board of Directors at a noticed public meeting and posted to SMUD's website along with the WMP. The reports concluded SMUD's WMP is comprehensive and meets statutory requirements as well as industry standard.

2.6.4 Wildfire Safety Advisory Board

Each year SMUD submits its WMP to the Wildfire Safety Advisory Board (WSAB). The WSAB reviews and provides comments and advisory opinion regarding the content and sufficiency of the WMP. SMUD will consider comments and opinions received by the WSAB in future documents. These advisory opinions can be found on their web page:

<https://energysafety.ca.gov/what-we-do/wildfire-safety-advisory-board/publications/>

2.6.5 *Budgeting WMP initiatives*

SMUD adopts its budget through open and public processes. WMP program commitments reflected in any given budget are impacted by many factors, including risk evaluations, system condition and requirements, emergency occurrences, economy, legislation, environment, and liability exposure. These commitments are consistently under evaluation, and program priorities can change if any of these factors shift.

3 Overview of preventive strategies and programs

This WMP addresses the preventive strategies and programs adopted by SMUD to minimize the risk of its electrical lines and equipment causing a catastrophic wildfire. The strategies and programs included in the WMP are evolving and are subject to change. As new technologies, practices and networks develop, and other environmental influences or risks are identified, changes to address them may be incorporated into future iterations of the WMP which is, in effect, a living document.

This WMP integrates and interfaces with various operating policies and asset management and engineering principles which are subject to change. As appropriate, the current versions of these documents are incorporated either as appendices to this WMP or by reference.

The following is a summary of SMUD’s programs and activities that support wildfire prevention and mitigation.

Table 4 Mitigation programs/activities

Design and construction
Ester-based insulating fluid in transformers
Cal FIRE exempt equipment in Pole Clearing Area (PCA)
Light Detection and Ranging (LiDAR) Ortho, Oblique Imagery
Increase overhead wire spacing to reduce wire to wire contact
Pole loading and placement
Transmission line rating remediation
Pole replacement and reinforcement
Wildfire resiliency design
Construction fire prevention program
Substation perimeter fencing
SCADA reclosers in PCA
Inspection and maintenance
Transmission line aerial patrols (helicopter)
Transmission line ground patrols
Transmission line infrared (IR) inspections (helicopter)
Transmission line splice and dead-end termination assessment program
Transmission and distribution wood pole intrusive inspections
Transmission and distribution vegetation right-of-way maintenance
Transmission and distribution annual subject pole clearing program
Distribution detailed line inspections
Distribution line patrols
69 kV and Pole Clearing Area 12 kV IR inspections (helicopter)
Visual inspections of distribution substations
LiDAR/Remote Sensing inspection of transmission for Vegetation Management
Inspection and maintenance programs for T&D lines and substations
IR inspection of energized overhead T&D facilities and equipment
Drive by of overhead distribution facilities and equipment
Detailed inspection of T&D facilities and equipment
Supplemental inspections of high fire risk areas
On-ground routine inspection
Operational practices
Disabling reclosing during fire season
Transmission and distribution system vegetation management maintenance patrols and work (tree pruning & removal) as needed for safety and reliability
Special work procedure for red flag warning (RFW)

De-energization protocols and notifications
Emergency Operations Planning: fire prevention plan
Hotwork procedures
Work procedures and training for persons working in locations and conditions of elevated fire risks
Safety and physical security protection teams
Increased staff for line and vegetation management crews in preparation of storm
Existing relationship with local government and fire safe councils
Transmission encroachment program
Provide liaison to county office of emergency services' (OES) during fire event
Leverage existing relationship with local government and fire departments
Targeted communications plan
Active environmental safety monitoring
SMUD's Emergency Operations Center partners with local emergency responders for coordination prior to and during an emergency
High fire threat district vegetation management inspection strategy (annual)
Inspecting trees with potential strike path to power lines
Expanded subject pole clearing
Expanded clearance distances at time of maintenance (Tier 2 & 3 in HFTD & PCA)
Patrol and pruning/Tree removal, Quality Control
Increased vegetation clearance at time of tree work

Situational/conditional awareness

Weather monitoring stations in targeted areas in the UARP
Coordinate and collaborate with Fire Safe Councils and County Office of Emergency Services throughout the year to prepare for RFW and high fire risk events
Contractor safety training and orientation for transmission and distribution vegetation management work
Monitor daily California Department of Forestry and Fire Protection website and active fires in California

Response and recovery

Critical event communications process and procedures

Emergency response plan
Field operations recovery procedures
Coordinate with neighboring entities

4 Risk analysis and risk drivers

SMUD uses its existing ERM framework to identify and assess enterprise level risks. SMUD’s ERM framework takes into consideration both quantitative and qualitative factors to determine the level of inherent and residual risk levels for a particular risk. An inherent risk level refers to the risk before any mitigations or controls are in place while the residual risk level refers to the risk after all mitigations and effective controls are considered.

4.1 Enterprise risk assessment

The ERM framework has a strong governance structure stemming from SMUD’s Board of Director’s Strategic Direction and is overseen by an executive body, the Enterprise Risk Oversight Committee (EROC). The framework requires that all enterprise risks be owned by an Executive and managed at the Director level.

The ERM framework includes a 5-step process and is integrated with SMUD’s internal audit process to check for assurance of proper control implementation. The framework requires continuous communications and consultation throughout the life of the risk. The 5-step ERM process is shown in Figure 2 which describes the objective of each step.

Figure 2 ERM 5-step process



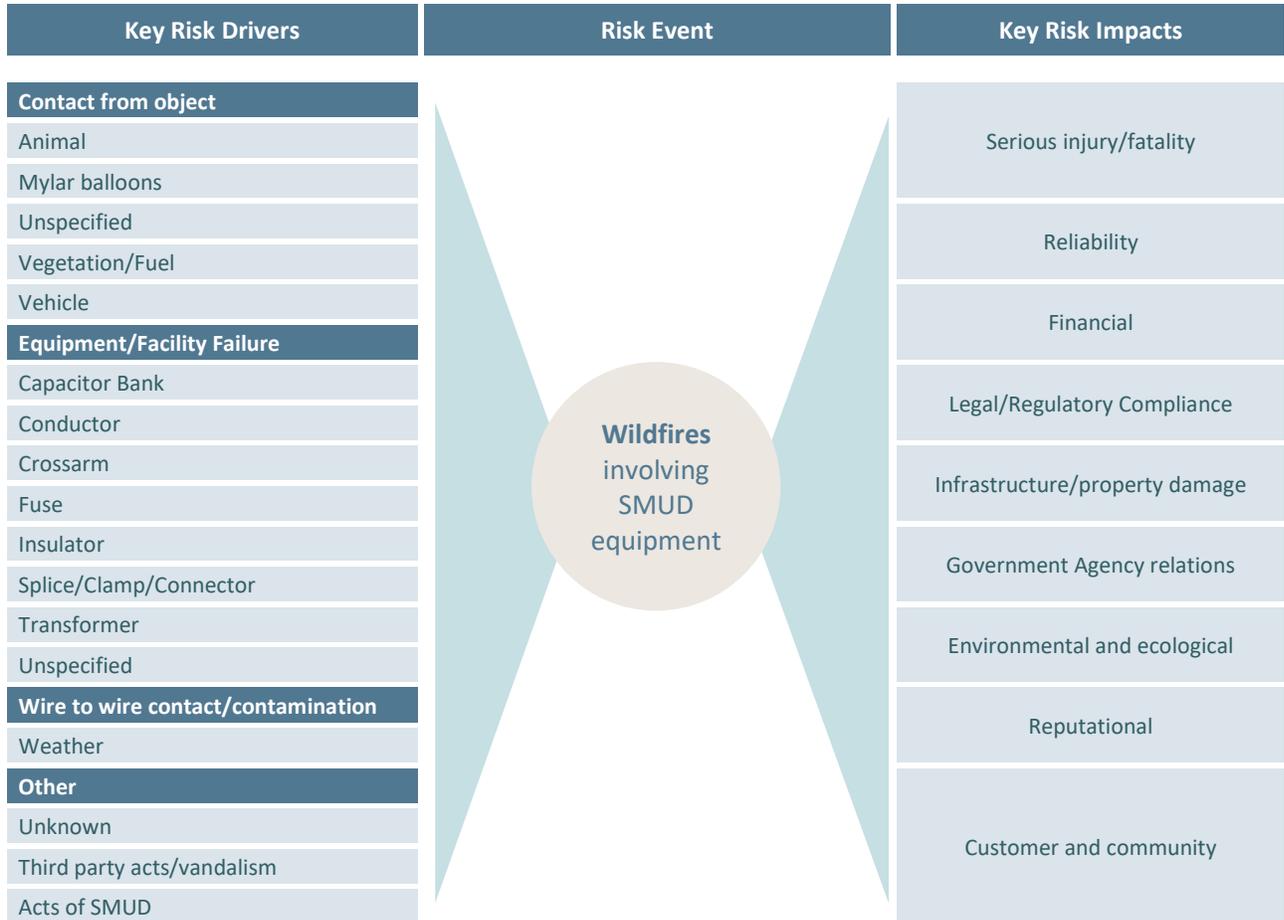
During a risk evaluation, the Director, manager, stakeholders, and subject matter experts (SMEs) are consulted. ERM staff gathers pertinent information to conduct the evaluation which includes a root cause analysis. Information gathered includes key risk drivers, key risk impacts, mitigations, processes, procedures, controls, and internal/external risk trend. SMUD uses a commonly accepted framework called the bow-tie method for its root-cause analysis. This method allows easy visualization of the relationship between the risk event, its drivers, and impacts, as well as preventive and mitigation activities. In addition, the method allows for a structured risk analysis where quantification is not possible or desired. SMUD’s ERM framework takes into consideration impacts to SMUD’s finances, legal, regulatory and compliance, operations, reputation, public safety, workforce, and environment.

4.2 Enterprise safety and wildfire risk

Following SMUD’s ERM assessment process, Subject Matter Experts (SMEs) were consulted in conducting a risk assessment for wildfires which could potentially involve SMUD equipment. The SMEs focused on potential causes of powerline sparks that could start a fire. The risk assessment was conducted to identify SMUD’s vulnerabilities, exposure to and impacts from a wildfire as well as to identify current controls and mitigations to prevent wildfire occurrence, likelihood, velocity, and impact.

Figure 3 provides the risk bow tie, which summarizes the assessment process.

Figure 3 SMUD's wildfire risk bow tie. Drivers and impacts are indicators that a risk event could occur, not a reflection of actual or threatened conditions.



4.2.1 Fire risk drivers

Powerline equipment is generally the same across all utilities where a small niche of manufacturers and suppliers are used to procure equipment for construction of facilities. Slight variances in design and construction may be expected between utilities. SMUD staff evaluated other utilities' fire causes and applied its own field experience to determine the potential risk drivers. Four categories were identified as potential for causing powerline sparks and ignitions:

- Contact from objects
- Equipment/facility failure
- Wire-to-wire contact/contamination
- Other

SMUD staff identified the following drivers associated with each category. These are discussed below but may not be limited to the following.

4.2.1.1 Contact from objects

Most overhead powerlines throughout the world are installed as bare wire on top of insulated poles and structures. Overhead powerlines are kept at a certain distance from the ground and from adjacent objects, based on the voltage level and applicable design criteria, to prevent contact and faults. However, with thousands of miles of overhead powerlines, contacts from objects are anticipated by utilities and can occur throughout the year.

Animals and highly conductive mylar balloons are some of the objects that can contact powerlines, resulting in possible sparks and arcs. While protection equipment such as circuit breakers, reclosers and fuses are installed to isolate the faults, there are time delays (within fractions of a second or seconds) associated with when the equipment senses the fault and proceeds to isolate (or "trip") the faulted section. The time delays are instant to the human, but not quite fast enough to prevent all sparks prior to tripping. Emitted sparks, molten metal or burnt foreign objects can fall on -- and potentially ignite -- any fuels underneath or near the powerline.

Vegetation such as trees, branches, palm fronds, etc., from inside and outside of powerline pathways can contact powerlines at any time, also resulting in possible sparks or arcs. Sometimes, the stress of contact is large enough to cause a connector or pole to fail, which will lead to wires falling and touching the ground. In some instances, the tree or branch may continue leaning on the powerline and continue sparking or catch on fire due to resulting sparks.

Additionally, vehicles contacting poles or supporting guy wires can damage or break the pole. The heavy, broken pole in turn can put too much stress on connectors or crossarms and cause wires to break and fall to the ground potentially emitting sparks and arcs.

4.2.1.2 Equipment failure

All man-made equipment fails at some point or another during its life. Failure modes can be discrete (internal) or destructive (materials ejected). Failure components such as hot line clamps, connectors and insulators can result in wire failure and cause the wire to fall to the ground. The energized conductors can emit sparks prior to breaker or fuse tripping/isolating. Transformers and capacitor banks can have internal shorts that can potentially be destructive and eject materials which could create a spark, leading to a fire.

4.2.1.3 Wire-to-wire contact/contamination

When two or more energized conductors contact each other, they will cause sparks and possible material to be ejected. There are many factors that could lead to such an occurrence. Any type of shaking of the pole or high winds may cause the powerlines to sway and touch. A shaking pole can be caused by vehicle contact or

livestock rubbing against a pole or supporting guy wires. Certain types of faults (shorts) down the line can cause powerlines to gallop (bounce and buck).

Contamination on insulators can create a path for electricity to flow. This unintended path can track and cause a fault. Typical causes are ash, dust, debris, and bird excrement on the insulator. These causes can usually be determined by burn marks along the insulator.

4.2.1.4 Other

SMUD's powerlines traverse through many parts of its service territory, including residential properties, along road rights-of-way (ROW), within business parking lots, etc.

Non-SMUD equipment and construction projects could be a possible cause of ignition. Even though property owners and contractors take precautions, their equipment can contact powerlines and cause sparking triggering fires in the vicinity. Although unintentional, these contacts may cause damage to powerlines, poles and supporting equipment which may cause sparks and trigger fires in the vicinity.

SMUD equipment can also be vandalized and damaged, which may cause sparks and fires.

SMUD takes pride in a properly trained and well-informed workforce. Crews perform switching, construction, and maintenance on facilities daily. However, the tools and vehicles they use can be sources of sparks or ignition. For example, driving a truck over dry grass/brush can cause the dry grass/brush to ignite. As such, SMUD trucks are equipped with fire suppression equipment and staff are properly trained to respond to an ignition and the use of the fire suppression equipment.

During Red Flag Warning (RFW) periods in the UARP, crews working in remote sites limit hotwork (such as welding, grinding, cutting etc.) to prevent an ignition. As a precaution, designated staff assigned as a fire-watch, may stay behind after work completion for up to thirty minutes to ensure a fire doesn't start after work crews leave a remote site. SMUD's VM contract crews have on-site fire suppression equipment, ex. fire rake, water backpack and shovels. On remote sites where a masticator is being used, crews have a 200 gallon or greater water tank on hand for fire suppression and perform a one-hour fire watch after work is complete.

4.3 Key risk impacts

If one of the risk drivers listed above were to occur, resulting in a fire ignition or wildfire incident, there could be many potential consequences. The worst-case scenarios could include:

- Personal injuries or fatalities to the public, employees, and contractors
- Damage to public and/or private property
- Damage and loss of SMUD owned facilities and assets
- Impacts to reliability and operations
- Damage claims and litigation costs, as well as fines from governing bodies
- Damage to SMUD's creditworthiness, or increases cost to borrow money or purchase insurance
- Environmental and ecological damage
- Damage to SMUD's reputation and loss of public confidence
- Customer and community impacts
- Financial

4.4 Climate change

The National Aeronautics and Space Administration (NASA) defines climate change as the change in the usual weather conditions and patterns found in a region.³ More specifically, it is a change in the average weather conditions such as temperature, rainfall, snow, ocean, and atmospheric circulation, or in the distribution of weather around the globe. According to NASA, scientists think that the Earth's temperature will keep increasing for the next 100 years. "This would cause more snow and ice to melt. Oceans would rise higher. Some places would get hotter. Other places might have colder winters with more snow. Some places might get more rain. Other places might get less rain."³

California has already been experiencing the impacts of climate change including prolonged droughts, increased coastal flooding and erosion and tree mortality. The state has also seen increased average temperatures, more extreme heat days, fewer cold nights, a lengthening of the growing season, shifts in the water cycle with less winter precipitation falling as snow and both snowmelt and rainwater running off sooner in the year. In addition to changes in average temperatures, sea level and precipitation patterns, the intensity of extreme weather events is also changing. More frequent extreme weather events and resulting hazards, such as heat waves, wildfires, droughts, and floods are expected.⁴

California's most recent, Fourth National Climate Assessment issued in November 2018 says that "climate change is expected to increase the frequency and intensity of wildfires," consistent with many expert predictions that climate change would increase the risk of large and severe wildfires, including a potential increase in the total area burned.⁴

Several climate-related factors have contributed to the increasing risk of wildfires. The severity of wildfires is generally a function of the condition of the combustible vegetation material involved, terrain or setting and weather conditions. Tree stress and mortality, including damage due to insect infestations such as the bark beetle exacerbate fire hazards creating a tinderbox, providing an environment for catastrophic fires. In addition, as air temperatures rise, forests and land are drying out, also increasing fire risks, and creating weather conditions ripe for fire ignition and expansion.

Fire season in much of California has historically extended from early spring through the late fall, due to the dry and hot nature of these months. As a result of the extreme weather conditions and other impacts from climate change as well as the increase in population density and development in the wildland-urban interface (WUI), there's a growing need for year-round fire prevention and preparedness. SMUD's service territory is predominantly developed land, shrubland and grassland, while our Upper American River Project traverses heavily forested areas. These varying land cover types will experience differing climate impacts and, as a result, have unique wildfire mitigation requirements.

4.5 Tabletop exercise

SMUD regularly conducts tabletop exercises (TTXs) to test, analyze and enhance the current level of SMUD's internal and external coordination and expertise in responding to potential wildfire threats related to SMUD's utility system facilities. The TTXs are used to enhance general internal awareness, test SMUD standard emergency operating plans and procedures in the wildfire context, invite collaboration with our public safety partners and community partners, and provide an opportunity to rehearse emergency practices in a simulated environment. The TTX's operational objectives are developed to evaluate SMUD's core response capabilities in three specific areas: (1) wildfire preparedness/mitigation, (2) emergency notification and response, and (3) short-term recovery operations and procedures.

SMUD utilizes the Homeland Security Exercise and Evaluation Program (HSEEP) principles for its exercise program management, exercise design, development, evaluation, and improvement planning processes.

³ Source: <https://www.nasa.gov/audience/forstudents/k-4/stories/nasa-knows/what-is-climate-change-k4.html>

⁴ California's Fourth Climate Change Assessment, January 16, 2019. <http://www.climateassessment.ca.gov/state/>

Each exercise program provides for analysis of data collected during the exercise as well as feedback obtained from relevant stakeholders to inform improvement planning.

SMUD hosts annual TTXs with internal and external stakeholders, including local fire, law enforcement and emergency services serving communities within the exercise design scenario. Strengths in the following areas have been identified: relationships with local emergency response agencies, coordination between the SMUD EOC and local agencies, information-sharing, and clarity of SMUD's response procedures and WMP. Where appropriate, recommendations for further collaboration and information sharing processes are developed.

4.6 Risk reduction efforts under the WMP

Since the adoption of its initial WMP, SMUD has initiated multiple projects to directly reduce the risk of ignitions from SMUD owned powerlines in the UARP and PCA. Three of those projects concluded in 2021 and 2022. The conclusion of these projects resulted in direct ignition risk reduction in Tier 2 and Tier 3 of HFTD areas. The remaining three risk reduction projects are more than halfway completed.

Working with its contractors SMUD completed a project in 2020 to allow remote de-energization of four 4kV circuits that were overhead at the time. The remote capability allowed Power System Operators to de-energize any or all four circuits during high fire threat weather conditions during fire season. The remote de-energization capability reduced the risk of ignitions in Tier 2 and Tier 3 of HFTD during high fire threat weather conditions. This project addressed risks related to the 4kV circuits while SMUD undertook its project to underground the lines.

After evaluating alternatives, SMUD committed to underground approximately three miles of 4kV lines in Tier 2 and Tier 3 of HFTD in the UARP. This undergrounding project was completed by summer of 2022. Seven hundred feet of bare 4kV overhead conductor remains in the HFTD, all of which is over rocky terrain underbuilt on 60 feet to 80 feet tall 69kV structures, and one span of tree conductor crossing over a river. The risk of ignitions in Tier 2 and Tier 3 of HFTD areas from 4kV distribution lines has been virtually eliminated by undergrounding the three overhead circuits.

SMUD also piloted the use of large drones to take high-resolution images of all transmission structures in the UARP. This pilot project concluded in 2021. The drone allowed taking photos of various powerline components on the entire structure, including the foundations, insulators, hardware, crossarms, and the static line on top. Photographs of the components were taken from various angles and elevations, allowing an almost 360-degree view of the individual components. The high-resolution images were analyzed off-site by third-party desktop inspectors. Deficiencies such as loose or missing palnuts (locknuts), loose nuts, loose or missing cotter pins, chipped/contaminated insulators, bent/damaged cross members, gunshot damage, and others were noted. SMUD staff reviewed and prioritized the deficiencies for field corrections. The most severe deficiencies were corrected immediately, or within six months. Other less severe deficiencies were scheduled for correction based on SMUD's normal repair timeframe. Most of the deficiencies found were items SMUD tower patrolmen normally find during annual visual inspections. However, some deficiencies would not have been discoverable without this technology. This pilot project provided very good feedback to tower patrolmen to focus on certain items during their inspections. This project also documented minimal wear and overall excellent condition of SMUD's UARP transmission lines that are over sixty years old. This project allowed SMUD to reduce the risk of ignition in Tier 2 and Tier 3 of HFTD areas due to hardware failure or worn components.

The Vegetation Management team has a six-year project to remove select incompatible trees, shrubs, and other vegetation within the transmission line corridor plus 200 feet on either side. The fuels reduction project comprises of mastication via use of ground-based equipment (tractors, feller bunchers, skidders, and chainsaws) to fell and extract trees up to 30 inches in diameter breast height or up to 20 inches diameter breast height in wildlife protected activity center; herbicide application on shrubs and invasives in previously masticated areas; and hand thinning and piling in rocky terrain and where slopes exceed 35%, and to protect

sensitive resources such as stream environment zones, archaeological sites, and critical habitat for threatened and endangered species. Mechanical treatments open the forest canopy, increase sunlight, and so increase the productivity and diversity of plants on the forest floor. Mechanical treatment reduces the risk of crown fires by extracting small to intermediate-size trees which carry fire into the forest canopy. Mastication will be used primarily to implement the ladder fuel treatment prescription, targeting woody shrubs and small-diameter trees, leaving a mixed species composition of 80-100 trees per acre. Mastication of shrubs and small trees (up to 11 inches diameter at breast height) will reduce the density of understory fuels and non-commercially sized trees, increasing heterogeneity in stand structure. Mastication converts ladder fuels to surface fuels and enhances decomposition of biomass, allowing prescribed fire to be implemented with greater ease and control by reducing the amount of oxygen within the fuel structure. Reducing fuels in this manner can allow for broader conditions under which prescribed fire may be applied while accounting for a range of ecological features and attributes, such as animal and bird diversity and soil chemical composition. Implementation of hand thinning is informed by design criteria accounting for and minimizing impacts to forest vegetation, soils, and wildlife. This effort began in 2020 and is expected to continue to 2023.

5 SMUD assets fire threat overview

SMUD provides electricity to its customers via substations and T&D line assets. Table 5 provides a high-level description of SMUD’s T&D assets.

Table 5 Asset description

Asset Category	Asset Description
Transmission line assets	Assets include conductor and transmission structures operating at or above 115 kV (lines that are tied to generation are considered transmission regardless of operating voltage).
Distribution line assets	Assets include overhead conductor, underground cabling, transformers, voltage regulators, capacitors, switches, line protective devices and street lighting operating at less than 69 kV (all 69 kV lines not tied to generation are considered distribution).
	Assets include major equipment such as power transformers, voltage regulators, capacitors, reactors, protective devices, relays, open-air

Table 6 provides an overview of SMUD’s T&D assets in CPUC High Fire Threat District (HFTD) tiers by circuit mile and percentage of total.

Table 6. Overview of SMUD’s T&D assets in CPUC HFTD tiers

Asset	Total	Outside HFTD		Tier 2		Tier 3	
	Circuit miles	Circuit miles	%	Circuit miles	%	Circuit miles	%
Total OH transmission	470	326	69%	89	19%	55	12%
12 & 21 kV (Generation tie lines)	<1	<1	0	0	0	<1	<1%
69 kV	38	7	18%	31	81%	0	0%
115 kV	51	51	100%	0	0%	0	0%
230 kV	381	268	70%	58	15%	55	14%
Total OH distribution	3868	3867	100%	<1	<1%	0	0
Total OH T&D circuit-miles	4338	4194	97%	89	2%	55	1%
	Total No.	Outside HFTD		Tier 2		Tier 3	
Total load serving substations	243	243	100%	0	0%	0	0%

Notes:

- All Tier 2 and Tier 3 facilities are in the UARP area, outside of SMUD’s electric service area.
- Values rounded to nearest mile

5.1 CPUC high fire threat district (HFTD)

SMUD directly participated in the development of the CPUC's Fire-Threat Map⁵, which defines a statewide high fire threat district (HFTD). SMUD has incorporated the HFTD map into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

In the HFTD map development process, SMUD served as a territory lead, and worked with utility staff and local fire and government officials to identify whether any areas within SMUD's service territory are at an elevated or extreme risk of powerline ignited wildfire. It was determined through that process and affirmed by both a peer review and a team of independent nationwide experts led by the California Department of Forestry and Fire Protection (CAL FIRE), that SMUD's service area is properly situated outside the HFTD. Outside of its service area SMUD's UARP facilities are situated within both Tier 2 and Tier 3 of the HFTD. Based on these processes, the existing environment and current information, SMUD believes that the HFTD map appropriately identifies the level of wildfire risk within SMUD's service territory and UARP. SMUD will continue to evaluate factors that may indicate the CPUC should expand the HFTD to include additional areas.

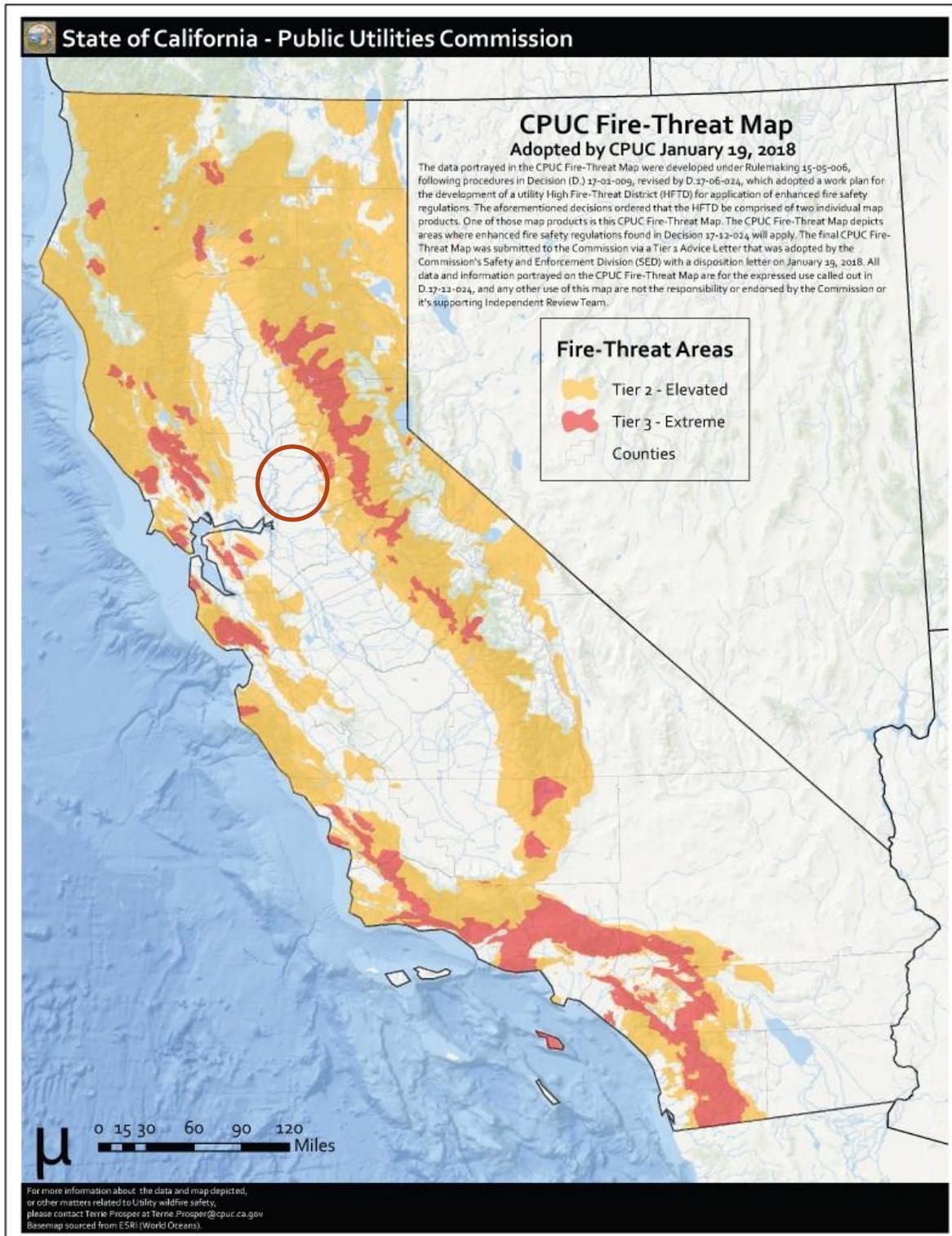
5.2 Fire threat assessment in SMUD service area

SMUD has never experienced a catastrophic wildfire involving its facilities. SMUD's service area in Sacramento County has a much lower wildfire risk profile than other areas in the State that have suffered destructive wildfires in recent years. When ignition events occur, they have historically been limited in scope. This is largely due to SMUD's more urban environment, flatter accessible terrain, low grasslands and other fuel sources outside forested areas and fewer wind events.

The CPUC Fire-Threat map identifies Tier 3, extreme fire risk, Tier 2, elevated fire risk, and areas outside of the HFTD. Figure 4 depicts the CPUC Fire-Threat Map and SMUD's service area location within the map.

⁵ Adopted by CPUC Decision 1-12-024.

Figure 4 SMUD’s service area within CPUC Fire-Threat Map



SMUD’s assets are located both within HFTD areas (including Tier 2 and 3) and areas not deemed within the HFTD (referred to as non-tier or outside HFTD in this document). Approximately 25% of SMUD’s overhead circuit-miles of wires are located within the HFTD, with approximately 10% located within Tier 3 (“Extreme Fire Threat”). None of SMUD’s distribution substations are located within the HFTD.

5.3 Fire threat assessment in UARP, Western Sierra Nevada Mountain range

SMUD's greatest fire threat risk is in the Western Sierra Nevada Mountain range, where the hydroelectric project known as the "UARP" is located. The project's powerhouses and switchyards are interconnected via multiple 69kV and 230kV transmission lines which traverse through the mountain range through CPUC's HFTD Tier 2 and Tier 3 designated areas. All 230kV circuits and three 69kV circuits are constructed with lattice steel towers between 100 feet and 150 feet tall. One 69kV circuit is constructed with three-to-five pole wooden structures between 60 feet and 80 feet tall.

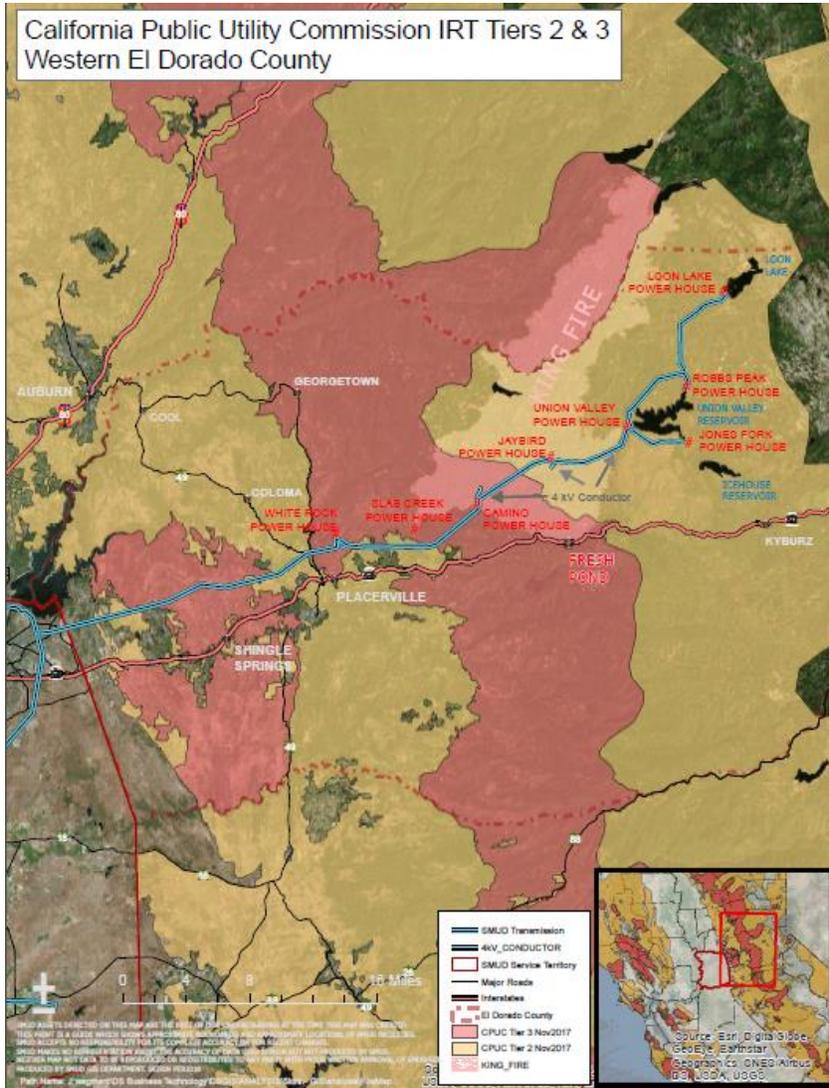
SMUD's UARP is in highly susceptible area to wildfires specifically due to the regional climate that facilitates regular drought conditions, the natural plant communities that produce excess fuel, and the natural and anthropogenic ignition sources. Within the UARP, vegetation adjacent to electrical infrastructure (powerhouses, transmission lines, switchyards, etc.) is a source of fuel. Extended periods of warm temperatures could increase fuels and the possibility of wildfires. Greater numbers of diseased and dead trees also increase this possibility.

The most notable recent wildfires are the Caldor Fire in 2021, King Fire in 2014, Freds Fire in 2004, and Cleveland Fire in 1992. The Caldor fire in 2021 did not impact SMUD's transmission lines and powerhouses. The King fire impacted approximately 20 miles of SMUD transmission lines in 2014. Historically, areas above 5,000 feet were less likely to see a major fire (between Robbs Peak and Loon Lake), with one major fire, Bottle Hill, in 1917 near Gerle Creek Reservoir. Several large fires have periodically burned in the lower elevation canyon areas near White Rock Powerhouse, the most recent being the Chili Bar Fire in 1979. Although the King Fire did not substantially damage hydroelectric infrastructure, it did do major damage to the forest and watersheds around the UARP. According to the U.S. Forest Service in El Dorado County, it is unlikely for any treatments or post fire timber harvesting to be conducted in the steep canyons where much of the hydroelectric infrastructure is located. SMUD's transmission line Right-Of-Ways acted as fire breaks to help stop the spread of the King fire.

Operation of SMUD's facilities in the UARP have never been associated with the ignition of a wildfire. The King and Caldor Fires demonstrate the high risk of fire in the terrain through which SMUD transmission lines traverse. Continuing drought and climate change continues to exacerbate this risk.

Figure 5 shows the UARP area where all SMUD's Tier 2 and Tier 3 assets are located.

Figure 5 CPUC Tier 2 and Tier 3 areas for SMUD’s UARP



5.4 CAL FIRE Fire Resource and Assessment Program (FRAP)

CAL FIRE publishes multiple maps related to fire threat throughout the state. SMUD refers to the Fire Hazard Severity Zone (FHSZ)⁶ map for many years to inform and plan maintenance activities. In November 2022, CAL FIRE published a new State Responsibility Area (SRA) FHSZ map⁷ for public review and comment. This map is expected to be finalized in 2023. Additionally, CAL FIRE will publish a new map depicting FHSZ for Local Responsibility Area (LRA) and Federal Responsibility Area (FRA). The new map depicts slight changes in fire hazard severity in the PCA SMUD will incorporate information from the new and future FHSZ maps into SMUD’s mitigation programs as needed.

Although SMUD takes CAL FIRE’s FHSZ mapping into consideration as part of its wildfire mitigation planning, SMUD’s Wildfire Mitigation Plan references the CPUC Fire Threat Map that focuses on the risk of utility associated wildfires⁸.

⁶ <https://egis.fire.ca.gov/FHSZ/>

⁷ <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/>

⁸ https://www.cafirefoundation.org/cms/assets/uploads/2020/05/CPUC_Fire-Threat_Map_final.pdf

6 Wildfire prevention strategy and program

SMUD has a robust set of measures to address potential wildfire risks. The WMP will incorporate existing efforts and identify the process moving forward to supplement them where a need is identified.

SMUD regularly coordinates with local fire agencies and other first response agencies. It also participates with emergency operations activities in its system areas. SMUD has robust Vegetation Management (VM) programs with accelerated and targeted VM work (pruning & removal) cycles and are using enhanced technologies including LiDAR and Ortho Imagery (these technologies can help identify diseased trees and trees that are a risk to SMUD facilities). It also has robust inspection and maintenance programs that include traditional aerial patrols with helicopters, IR inspections using helicopters (which can detect heat from power equipment before an event occurs) and regular ground inspections of all facilities (including core testing of the wood poles).

SMUD has explored potential system improvements in certain locations such as the use of non-sparking equipment in key areas (e.g., use of CAL FIRE exempt fuses), replacing wood poles with steel or ductile iron in certain cases and the use of covered conductor alternatives.

SMUD has protocols for disabling automatic reclosing and for de-energizing lines for public safety. Some conditions that factor into these protocols include: RFW, forecasted temperatures above 100°F, winds exceeding design standards and low humidity. It also has an Outage Communications Plan that addresses potential de-energization events. SMUD will include targeted messaging for affected areas that will set expectations and identify support resources. Table 7 describes activities that address SMUD’s key wildfire risk factors.

Table 7 Activities that address wildfire risk factors

Risk factor	Activity
Fuel	Vegetation management Fuels reduction Use of LiDAR and Ortho Imagery
Equipment/facility failure	Routine maintenance Focused design and construction standards to reduce ignition sources (e.g., use of non-expulsion fuses and arrestors, replacement of wood poles, undergrounding and other options) Transmission and distribution line detailed inspections and annual patrol No reclosing during fire season Intrusive pole testing and pole replacement De-energization of lines during certain conditions
Contact from object(s)	Animal/bird guards Raptor construction (increased line spacing) Increased vegetation clearances (at time of work)
Wire to wire contact	Weather station and monitoring
Other	SMUD worker/contractor education on fire ignition sources from normal work activities

6.1 Distribution grid operational practices

6.1.1 *Disabling reclosing during fire season*

SMUD has procedures for the operation of reclosers. For the purposes of those procedures, fire season is defined as:

- May 1 to October 1, or
- RFW in effect for areas inside or immediately surrounding the PCA

SMUD disables automatic reclosing on certain substation and line reclosers that extend into the PCA. In some cases, the line reclosers are completely bypassed with fuses if automatic reclosing cannot be disabled. On circuits where line reclosers are bypassed, the fuses provide protection to the end of the line. Due to climate change, the dry summer season is extending further into the year. Reclosing will remain disabled until the first major rain event in the service territory. See Figure 7 for graphic of the PCA.

6.1.2 *Planned de-energization during fire season*

During fire season, SMUD has elected to take certain measures to mitigate the risk of wildfires in the PCA, that could potentially migrate to the HFTD areas. When weather conditions that precede wildfires are forecasted and a wildfire threat is imminent, SMUD's Distribution System Operations (DSO) personnel have the authority to de-energize select distribution circuits in the PCA. DSO personnel will use individual or multiple de-energization triggers listed below, as well as power system knowledge and potential community impacts, to make de-energization decisions. This decision requires a balancing of all these factors as well as a knowledge of the area and operation of the power system. No single trigger is determinative. DSO relies on weather data from various sources, including Wunderground.com and SMUD's internal Energy Management System.

Triggers for de-energization of PCA circuits:

- Imminent fire danger
- Customer or community impacts
- A RFW declaration by National Weather Service in effect for areas inside or immediately surrounding the PCA
- Critically dry vegetation that could serve as fuel for a wildfire
- Low humidity levels
- Temperatures over 100°F
- Winds projected beyond 12kV design criteria (56 mph)
- Mandatory fire orders in effect (as directed by any Agency Incident Commander)
- On-the-ground, real-time observation from SMUD or other agency field staff

SMUD's DSO personnel have the authority to de-energize portions of the distribution grid during emergency conditions when requested by local law enforcement or fire officials. These requests are handled individually, and don't fall under PUC 8387 requirements.

6.2 Transmission grid operational practices

6.2.1 Disabling reclosing

All Valley 115 kV, 230 kV and UARP 69 kV, 230 kV transmission auto reclosers are disabled and will remain disabled to mitigate wildfire risks. The disabling of reclosing follows fire season described in 6.1.1

6.2.2 Planned de-energization during fire season

SMUD's Power System Operators (PSO) have the authority to de-energize portions or all the Valley and UARP transmission line(s) for safety, reliability, conditions beyond design criteria, threat of wildfires and during emergency conditions when requested by local law enforcement or fire officials. Per existing protocols, planned de-energizations are coordinated with interconnected agencies.

During active fire season as declared by CAL FIRE the PSO is authorized to de-energize portions or all the Valley and UARP transmission line(s) when there is imminent fire danger, mandatory fire orders are in effect, and/or the transmission system is experiencing conditions beyond design criteria. The PSO will take a combination of many factors into consideration when implementing de-energization procedures, which include the triggers listed below, as well as power system knowledge and potential community impacts. De-energization decisions require a balancing of all these factors as well as a knowledge of the area and operation of the power system. No single element is determinative.

- Extreme fire danger threat levels, as classified by the National Fire Danger Rating System
- A RFW declaration by the National Weather Service
- Low humidity levels lower than what is required for a RFW
- Sustained winds exceeding design standards
- Site-specific conditions such as temperature, terrain, and local climate
- Critically dry vegetation that could serve as fuel for a wildfire
- On-the-ground, real-time observation from SMUD or other agency field staff

The PSO utilizes various operational and situational awareness tools to determine when de-energization is appropriate. The tools are listed below:

- Weather data telemetered into SMUD's Energy Management System, such as wind speed, wind direction, air temperature, barometric pressure and relative humidity
- US Forest Service – Wildland Fire Assessment System, <https://www.wfas.net/>
- CAL FIRE Incidents Information, <https://www.fire.ca.gov/incidents>
- CAL FIRE California Statewide Fire Map: <https://www.fire.ca.gov/incidents/>
- National Weather Service: <https://www.weather.gov/>
- Indji Watch real time operational tool
- Geographic Information System (GIS) based tools
- ALERTWildfire: <http://www.alertwildfire.org/tahoe/index.html>
- NOAA/National Weather Service Storm Prediction Center: <https://www.spc.noaa.gov/>
- National Significant Wildland and Fire Potential Outlook, <https://www.predictiveservices.nifc.gov/outlooks/outlooks.htm>

6.3 Infrastructure inspections and maintenance

SMUD performs a multitude of time-based inspections on its T&D facilities. A description of the inspections is summarized in the following sections.

6.3.1 Transmission line inspections

SMUD's transmission lines are grouped in two inspection areas. UARP region includes all lines east of Folsom going up to the hydroelectric facilities in the Sierra. The Valley region comprises of all transmission lines in SMUD's service territory.

6.3.1.1 Aerial patrols (helicopter)

SMUD uses helicopters to perform aerial inspections of transmission lines. During these patrols, line inspectors inspect the condition of line structures and attachments, any structural problems and safety hazards, damage to insulators, vibration dampers, hardware, conductors, static shield wires, optical ground wires, signs of hot spots, potential vegetation concerns and tower identification signs (aerial signs).

Aerial patrols are performed twice a year on all lines in the UARP and once a year in the Valley.

6.3.1.2 Ground patrols

Line inspectors use a combination of walking and driving when conducting ground patrols. They visit transmission tower sites to make detailed visual inspections and on occasion they complete IR inspections. The line inspectors utilize binoculars to detect any damage to above ground components. Line inspectors may climb towers identified with severe corrosion or deformation to determine the corrective action required.

Ground patrols are performed annually on all lines in the UARP, and every two years on all lines in the Valley.

6.3.1.3 IR inspections (helicopter)

The line inspectors use IR cameras to inspect transmission lines as part of one of the helicopter patrols. An IR camera is used to identify "hot spots" on current carrying components of the transmission line. Hot spots could be an indication of loose connections that may fail. The images are saved, and written reports are prepared, which document the conditions found. The documentation identifies the location, problem found, date and time of the IR inspection. When the thermographer identifies abnormal conditions, these are reported for investigation and correction as necessary. Items identified are reported and scheduled for correction.

IR inspections are performed annually on all lines in the UARP, and every two years in the Valley.

6.3.1.4 Wood pole intrusive inspections

Intrusive inspections require sample material be taken for analysis, and/or using more sophisticated diagnostic tools beyond visual inspections or instrument reading. Wood poles are subjected to an intrusive inspection to determine and identify problems such as rot and decay. The inspection is performed using a calibrated drill bit that records the resistance and pressure required to drill a fixed diameter hole to a measured depth. The results are produced as a graph on a depth scale which is used to find voids and decay within the pole.

SMUD intrusively inspects wood poles at a minimum cycle of 10 years and a maximum cycle of 14 years.

6.3.1.5 Vegetation right-of-way maintenance

Both line inspectors and VM planners visually inspect the T&D ROW for encroachments, access road conditions and safety hazards. Two traditional helicopter patrols are also conducted annually by certified arborists or registered professional foresters to specifically inspect for vegetation issues that could threaten SMUD facilities. The VM ROW maintenance program's approach is to remove and prune vegetation in the

ROW of incompatible species and to maintain low-growing native and diverse plant communities that are compatible with electrical facilities by using Integrated Vegetation Management (IVM) Wire Zone-Border Zone Management which is the industry standard. This is a long-term approach which supports system reliability through reclaiming the ROW and managing for future workload. This approach allows for ongoing monitoring of vegetation corridors to prevent encroachment into the minimum vegetation clearance distance (MVCD) and ensures SMUD facilities meet or exceed state laws and industry standards.

Traditional (boots on the ground) vegetation ROW inspections are performed annually on all transmission, and distribution lines in the UARP, and regularly one to three years on T&D lines in the Valley.

6.3.1.6 Splice assessment program

This program is designed to assess the integrity of transmission conductor splices. The technology employed by a contractor uses an x-ray machine that encompasses a splice and takes an x-ray image of the splice. Inspectors then evaluate the image to determine the internal condition of the splice. This allows staff to identify splices that are potentially close to failure. A special type of in-line splice connector corrector is installed to strengthen the splice when needed.

6.3.1.7 Aerial photography via UAV with desktop review

SMUD has a new program that uses large drones to capture high-resolution photos of transmission structures. The photos are reviewed separately offline by the contractor and SMUD's trained personnel. The high-resolution photos allow the reviewer to zoom-in and identify deficiencies that are not possible to identify during traditional inspection methods. The reviewer can identify loose or degrading hardware including cotter keys, improper splice installation, loose fiber optic or ground wire attachments, stressed/chipped/tracked insulators, foundation problems, bullets lodged in conductors, etc. The photos are taken from multiple angles and elevations allowing in-depth review and confirmation of deficiencies. Identified deficiencies are scheduled for correction as needed.

Aerial photography with desktop review will be performed once for all structures, and a cycle will be established after.

6.3.2 Distribution line inspections

SMUD performs various inspections on distribution lines to ensure safety, reliability, and consistency with standards in California Public Utility Commission (CPUC) General Order (GO) 95, GO 128 and GO 165.

6.3.2.1 Detailed line inspections

Line inspectors use a combination of walking and driving when conducting detailed line inspections (DLIs). They visit each SMUD pole to make detailed visual inspections. The line inspectors utilize binoculars to detect damage to above ground components attached to the pole. The inspectors look for broken or loose hardware; mechanical damage to any component; condition of guy wires and anchors; condition of insulators and conductors; condition of disconnects and fuse holders; condition of risers and conduits; condition of transformers, reclosers and cap banks. Ground conductors, moldings, signs, and other minor hardware is also inspected. Similar inspections are performed on pad-mounted equipment and equipment installed below grade in vaults or building basements. Identified deficiencies are scheduled for correction as needed.

DLIs are performed every five years on all overhead distribution equipment and pad-mounted equipment, and every three years on underground equipment.

6.3.2.2 Line patrols

Line patrollers patrol their designated service area and track their progress with a GIS enabled visualization tool. The use of the tool ensures that all devices within SMUD's service territory are patrolled. The patrollers

are looking for obvious signs of defects, structural damages, broken hardware, sagging lines and vegetation clearance issues. Identified deficiencies are scheduled for correction as needed.

Line patrols are performed annually on all distribution lines and equipment.

6.3.2.3 69 kV and Pole Clearing Area 12 kV IR inspections (helicopter)

SMUD performs helicopter IR inspections on 69 kV circuits in the Valley and 12 kV circuits within the PCA. See section 6.3.1.3 for additional description.

69 kV and PCA 12 kV IR inspections are performed every other year in the Valley.

6.3.2.4 Wood pole intrusive inspections

Distribution wood pole intrusive inspections follow the same criteria as transmission wood poles intrusive inspections. See section 6.3.1.4.

6.3.2.5 Annual pole clearing program

The pole clearing program is an annual requirement to clear vegetation around poles in the PCA that have certain CAL FIRE non-exempt equipment on them. This program follows California Public Resource Code 4292. The code calls for clearing vegetation within a 10-foot radius of a pole or tower on which non-exempt equipment is attached, unless such pole or tower meets certain criteria that makes it exempt from the clearance requirements. SMUD contracts this activity out for completion prior to May 15th of each year.

6.3.3 Distribution substation inspections

SMUD performs various inspections on substations to ensure safety and reliability. SMUD inspections meet or exceed standards in CPUC GO 174.

6.3.3.1 Visual inspections

Substation inspectors visit each SMUD substation to visually inspect the facility and all equipment within. The inspectors look for broken or loose hardware; vandalism or damage to any equipment; oil or gas leaks; perimeter fence security; condition of the buss, insulators, and other hardware; condition of the control house; conditions of the poles/structures and lines exiting the substation; condition of the disconnects and fuses for signs of damage and connectivity. Deficiencies are noted and scheduled for correction as needed.

Visual inspections are performed at least 10 times per year.

6.4 Vegetation management

SMUD's VM program is responsible for the patrol, work plans and quality control (QC) audits of the actual tree work for the transmission and distribution system in the Valley, as well as the transmission and distribution system in the UARP. These activities are performed year-round to maintain compliance with applicable Federal Facilities Design, Connections and Maintenance (FAC) 003-5 and State regulations, including Public Resources Codes section 4292 and 4293; and incorporate the standards in CPUC GO 95 Rule 35.

6.4.1 Distribution system vegetation management

SMUD performs routine traditional vegetation maintenance, such as pruning and removal, on a time-based interval. This interval consists of one, two, and three-year ground-based field patrols. The field patrols are ground based inspections of tree and conductor clearances and hazard tree identification. The results of the patrols are targeted areas for vegetation pruning or removal.

SMUD hires contracted Line Clearance Qualified tree contractors to complete the identified annual vegetation work (pruning and removal) needed to ensure public safety and electric reliability as well as reduce wildfire risk in SMUD's service territory. During the tree work, the contractor aims to achieve up to 15 feet of

clearance in local responsibility areas within SMUD's Service Area and 30+ feet of clearance in the HFTD (Tiers 2 and 3) at time of tree work, unless otherwise directed by SMUD VM staff. The contractor also clears vegetation from SMUD's secondary voltage, service drops and pole climbing space on an as needed basis. SMUD's contractors follow American National Standards Institute (ANSI) A300 concepts and utility directional pruning, which supports proper pruning/tree health while achieving and maximizing the work cycle.

6.4.2 Transmission system vegetation management

SMUD VM planners perform traditional annual ground-based field patrols to ensure compliance with state and federal regulatory requirements (Public Resource Code 4293) and alignment with standards in CPUC GO 95 Rule 35 and FAC 003-5. The field patrols are traditional, ground-based inspections of tree and conductor clearances and hazard tree identification. The results of the patrols are targeted areas for vegetation pruning or removal. Additionally, SMUD completes two annual aerial patrols in El Dorado County to address the ongoing challenge of tree mortality due to drought and various insect vectors.

SMUD hires contracted Line Clearance Qualified tree contractors to complete the identified annual vegetation work (pruning and removal) needed to ensure public safety and electric reliability as well as reduce wildfire risk.

During the tree work, the contractor follows the planner's prescription (scope of work) to achieve the desired safety clearance. SMUD's contractors follow ANSI A300 concepts and utility directional pruning, which supports proper pruning/tree health while achieving and maximizing the pruning cycle. Additionally, SMUD's transmission VM program aligns with ANSI A300 Part 7 IVM standard.

6.5 Fire mitigation construction

6.5.1 Ester-based insulating fluid in transformers

Natural ester-based insulating fluids are derived from renewable vegetable oils – providing improved fire safety, transformer life/load ability and environmental benefits that are superior to mineral oil and unsurpassed by any other dielectric coolant. SMUD began purchasing and installing pad mounted and pole mounted transformers with ester-based fluid in 2004. All new distribution transformers installed since 2004 and moving forward contain ester based insulating fluid. This includes replacements for old transformers and new installations.

6.5.2 Non-expulsion equipment in PCA

SMUD has identified additional targeted wildfire mitigation measures for the PCA. A capital program is in place and scheduled to replace all expulsion type equipment. SMUD may have to replace poles, lines or equipment as ongoing activities. For this reason, SMUD crews will also install non-expulsion equipment (CAL FIRE exempt equipment) as part of any construction activity in the PCA.

6.5.3 Weather stations

SMUD has 14 weather stations within its service territory and UARP, eight are in the Sacramento Metropolitan area and six in the UARP. Of the six in the UARP, four weather stations are positioned on towers located within the HFTD to support SMUD's de-energization procedures. Data from weather stations installed in SMUD's service territory and UARP assist in the real-time monitoring of weather conditions for situational awareness and to help inform implementation of mitigation measures such as de-energization of transmission lines.

6.5.4 Covered conductor and Ductile Iron poles

A new generator tie line was required to interconnect a new small hydro generator to PG&E's distribution system in the UARP. This opportunity was used to pilot the installation of covered conductor installed on ductile iron poles. This line is the first of its kind in SMUD's experience and has provided valuable information

to SMUD engineering and construction staff. This information can be used to identify other potential locations for use of covered conductor solutions.

6.6 Enhancement and mitigation projects

SMUD forecasts and plans for upcoming work several years in advance. This planning process allows adequate level of staffing and funding for needed projects. This section identifies the specific upcoming projects that help reduce SMUD's wildfire risk.

6.6.1 *Install non-expulsion devices in PCA*

Start date: 2020

Expected completion: 2025

This project targets SMUD's PCA to reduce the risk of fire ignitions by installing non-expulsion equipment (CAL FIRE exempt equipment⁹). Existing overhead fuses and fuse holders will be replaced with non-expulsion type fuses. Existing arresters will be replaced with new arrestors that have arc protection. In addition, the connectors used to attach the devices to conductors will be replaced with Cal FIRE exempt wedge-type connectors.

6.6.2 *Replace #6 Copper conductors in PCA*

Start Date: 2021

Expected Completion: 2023

This project targets SMUD's PCA for removal of #6 copper conductors and replacement with heavier gauge aluminum. The project was proposed in conjunction with Eagle Take Permit mitigation work to reduce avian contacts issued in connection with the expansion of SMUD's Wind Farm in Solano County. The mitigation activity involves re-framing approximately 185 poles to increase overhead conductor spacing.

6.6.3 *UARP 4kV UG conversion*

Start Date: 2020

Completed: 2022

After performing a feasibility study of alternatives, SMUD decided to remove the 4kV bare wire lines in the UARP and install underground infrastructure. Two of the shorter lines were undergrounded in 2020 and 2021. Construction was completed on the longest of the three lines in summer of 2022.

6.6.4 *UARP Fuels Reduction*

Start Date: 2019

Expected Completion: 2023

This project is designed to help protect the UARP transmission lines and strengthen the fire break value it provides. The project area includes the entire length of SMUD's UARP transmission line within the existing right-of-way corridor plus approximately 200 feet on each side. Project treatments are designed to increase the area of forest lands treated for fuels reduction and prescribed fire and contribute to the longer-term restoration of the Crystal Basin forested landscape. Implementation measures will reduce the density of surface and ladder fuels by mechanical thinning, mastication, and hand crew work as part of a larger suite of silvicultural prescriptions that restore mixed conifer composition, health, and vigor. The project seeks to establish conditions that allow for a mosaic of multiple age class forest stands, variation in tree size, density,

⁹ Additional Information: <https://osfm.fire.ca.gov/media/8482/fppguidepdf126.pdf>

and species composition through treatments that retain the largest trees while establishing conditions that allow for safe and efficient fire suppression, especially around private inholdings of Sierra foothill communities.

6.6.5 Install SCADA reclosers in PCA

Start Date: 2024

Expected Completion: 2026

The existing 12kV feeders serving PCA customers are non-SCADA. This project will install SCADA enabled reclosers on feeders that serves SMUD's PCA customers. The SCADA reclosers will provide distribution operators visibility to the circuits and ability to operate the recloser remotely, including remotely disabling the reclosing function. The SCADA enabled reclosers will have modern microprocessor-based controllers, which will provide SMUD engineers the flexibility of fast-trip settings during fire season, and normal settings for improved reliability during storm season. Visibility to circuit's measured values will provide distribution operators the ability to remotely de-energize the circuit(s) when conditions warrant or when requested by emergency response personnel.

6.7 Pilot projects

Pilot projects are initiated to explore technologies and practices that are new to SMUD. These projects are intended for SMUD staff to evaluate the effectiveness and benefits of the technologies or practices. The pilot must prove successful to implement the technology or practice. Some of the factors considered at the conclusion of a pilot are proven risk reductions, material and installation costs, ease and efficiency of installations and overall effectiveness of the technology. Based on the results of the pilots, SMUD may elect to integrate the technologies or practices into its various ongoing maintenance programs. Current pilot projects are described below.

6.7.1 VM Aerial LiDAR,¹⁰ ortho and oblique imagery

Start Date: 2017

Expected Completion: As needed

SMUD contracted with an external vendor to utilize LiDAR and remote sensing to supplement or enhance traditional "boots on the ground" vegetation patrols. Both LiDAR and Ortho imagery is obtained from rotary and fixed wing aircraft. The technology measures vegetation clearance distances from the conductor in both "as flown" and modeled conditions. Modeling is taking all the engineering calculations for maximum load and wind ratings to calculate clearance distances in "full operating range of the respective facility." Ortho Imagery is used to provide a more accurate and pre-mature visibility of vegetation in decline that may not yet be visible to the human eye.

The vendor captured LiDAR data along the transmission corridors in the UARP, as well as the portions of Sacramento County designated as CAL FIRE's State Responsibility Area (SRA) for both T&D circuits. The LiDAR detections are categorized by priority. As soon as SMUD VM receives notification, SMUD VM field checks within 2-3 business days, and most within the same day data is received). Urgent and future potential conflicts are field checked and tree work prescribed as needed within 2-4 weeks of obtaining the data. Additionally, longer range detection conflicts are prioritized and incorporated into routine annual patrols

¹⁰ Additional Information: <https://www.neonscience.org/lidar-basics>

(Transmission & SRA Distribution). These are reviewed by SMUD VM planners during annual patrols and tree work prescribed as required.

6.8 Emerging Technologies

SMUD recognizes that numerous emerging technologies are developing and may play a role in building the resiliency of the system. SMUD will continue to monitor available technologies in future WMPs.

6.9 Workforce Training

SMUD has work rules and complementary training programs for its workforce to help reduce the likelihood of the ignition of wildfires. In summary:

SMUD Line workers complete a 4-year apprenticeship with over 7,500 hours of on-the-job training, in-class, hands-on, and eLearning training. Beyond the carefully documented and tracked on-the-job training Line worker Apprentices also participate in 2 weeks of Initial Field Training, a 24 week Cold / Hot School, and annual safety / regulatory bundled training. All training programs include a mix of classroom and hands-on training. Each Apprentice is held accountable to their training and progress is measured through a step test system that includes a written and hands-on / practical test every six months.

In addition, all new SMUD Line workers receive a 1.5-hour hands-on Fire Safety training during Initial Field Training. This training consists of 30 minutes classroom training that covers hazards, hot work near power poles and off-road activities, red flag warnings, preparedness, fire extinguishers, and more. The training also includes about 60 minutes of hands-on training using fire extinguishers. In addition, all SMUD Line workers receive a 30–60-minute Fire Safety training every two years. This training includes classroom and hands-on training. SMUD also offers a 30-minute Fire Safety eLearning module that can be offered when the hands-on training is not feasible.

For work occurring in the UARP, all employees and contractors receive wildfire prevention, mitigation, and response training prior to the start of work. This includes compliance requirements for SMUD's Hot Work Standard and Eldorado National Forest's Project Activity Level fire prevention and mitigation measures.

7 Response Guidelines

7.1 Emergency Preparedness and Response

As a publicly owned utility, SMUD has planning, communication, and coordination obligations pursuant to the California Standardized Emergency Management System (SEMS) Regulations adopted in accordance with Government Code section 8607. The SEMS Regulations specify roles, responsibilities, and structures of communications at five different levels: field response, local government, operational area, regional and state. SMUD has adopted SEMS and other local, state, and federal emergency management doctrine into its comprehensive Emergency Operations Plan (EOP). The EOP identifies wildfire as a major risk in accordance with this Wildfire Mitigation Plan. Pursuant to this structure, SMUD regularly coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies, as a peer partner.

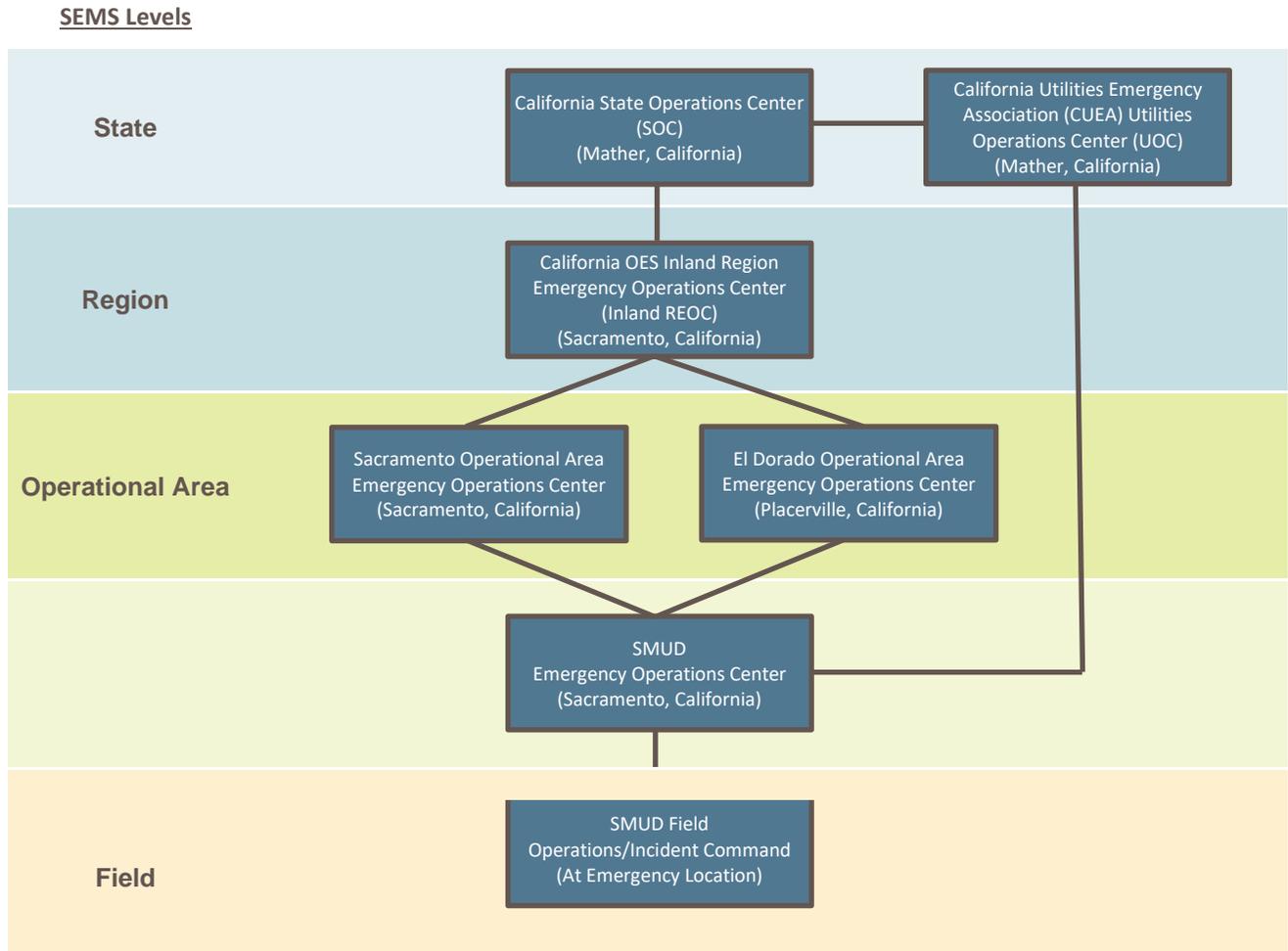
SMUD interacts with emergency response agencies on a peer-to-peer relationship. As part of SMUD's response to a storm, fire, rotating outage, black start events, etc., SMUD collaborates with the local Office of Emergency Services (OES) and provides an agency representative (liaison) to the county (and/or city) Emergency Operations Centers (EOC) to ensure appropriate communication and coordination. Our two primary coordination points for wildfire-related coordination are Sacramento County OES and El Dorado County Sheriff's Office OES (for the UARP region). Additionally, SMUD maintains good relationships with Yolo (gas pipeline), Placer (service territory and UARP), Solano (Wind Farm) and Yuba (Camp Far West) counties.

Upon notification of potential proactive de-energizations or rotating outage events due to wildfire concerns, Emergency Preparedness (EP) staff will coordinate with the appropriate County OES to ensure that all first and emergency response organizations are notified of the de-energization and estimated restoration time (if known). In addition, during a highly localized event, EP Staff will directly notify first and emergency responder jurisdictions of the de-energization/outage.

SMUD EP staff also invite counties to send agency representatives into SMUD's EOC. These representatives can include personnel from the following organizations: City of Sacramento Fire Department, Sacramento Metropolitan Fire District, City of Folsom Fire Department, local cities, Sacramento County OES, the National Weather Service, and other local critical infrastructure agencies, ensuring coordination for our service territory.

Additionally, SMUD EP staff serve as SMUD's utility representatives when requested by the California Governor's OES (CalOES) at the California State Operations Center (SOC) for the California Utilities Emergency Association (CUEA), providing a direct link for critical infrastructure coordination to the SOC.

Figure 6 Standardized emergency management system (SEMS) emergency operations coordination



7.2 Public and agency communications for a potential wildfire

Public safety is a guiding principle at SMUD. De-energizing powerlines may be the safest approach and makes sense if the risk of a wildfire starting and spreading is severe. While SMUD’s WMP activities are designed to mitigate wildfire danger, in instances of high fire threat conditions, interruption of electrical service by de-energizing powerlines may be necessary as a last resort. SMUD proactively communicates with customers and key stakeholders through multiple channels about preparing for potential power outages, and the power restoration process. SMUD recognizes that many entities and individuals are particularly vulnerable during extended power outages and makes every effort to provide up-to-date information to these populations prior to, during and after an event.

This proactive communication is utilized for:

- 1) A wildfire threat to localized circuits within the SMUD service territory that results in localized de-energization.
- 2) A wildfire threat to SMUD’s UARP hydroelectric generation and transmission system that results in a de-energization event causing a capacity/energy shortage (rotating outages).

- 3) A wildfire threat to a major shared transmission line(s) that impacts the statewide grid or parts of it and creates a resource shortage for the utilities, including SMUD, that rely on the resources the line(s) provides.

SMUD has implemented an opt-in program on smud.org that allows for vulnerable populations to receive additional information or notifications in the unlikely event of a wildfire in SMUD service territory.

Among SMUD's vulnerable customers are those enrolled in the Medical Equipment Discount Rate program (MED rate). These customers rely on specialized medical equipment. SMUD also has a Vulnerable Customer program which allows customers to self-identify as vulnerable for concerns not covered by our MED Rate. SMUD has more than 11,300 customers who rely on specialized medical equipment and who are enrolled in the MED rate program or enrolled in our Vulnerable customer program. SMUD will send these customers an email or letter each year to remind them of the risk of wildfire danger, to have an emergency back-up plan if an outage occurs and refer them to www.smud.org/WildfireSafety for more information.

All SMUD customers can visit the smud.org/wildfiresafety webpage where they'll be able to find:

- Wildfire mitigation plan
- Information on how SMUD mitigates fire risk
- Emergency preparedness tips guide (7 languages)
- Links to additional resources
- Video on wildfire mitigation efforts
- Rotating outage map and periodic event updates
- Frequently Asked Questions on the de-energization process

[Smud.org/WildfireSafety](https://smud.org/WildfireSafety) provides access to information about SMUD's effort in wildfire planning and prevention (including an archive of this and prior WMPs), how to identify fire risk in areas where SMUD maintains electric facilities, a video on our wildfire mitigation efforts, emergency planning and preparation (in six different languages) and SMUD's de-energization protocols.

SMUD also proactively communicates before potential emergency events about our efforts to prepare for and reduce wildfire risk.

In advance of peak wildfire season, SMUD conducts ongoing communications about how to prepare for emergencies in the event of a wildfire, natural disaster, or major outage. The communications include:

- Letters and emails to MED Rate, Senior ID and vulnerable customers, with preparation checklists.
- Outdoor billboards
- Digital monitors in our customer lobby
- Bill inserts
- Reminders on SMUD.org homepage encouraging customers to update contact information
- Customer newsletters (print and email) on safety tips, preparation.

SMUD's public information specialists will provide ongoing updates on multiple platforms, including social media, to provide customers and the community with up-to-date information about an emergency or potential emergency.

SMUD's government affairs representatives will reach out to the executive staff of local governments, elected officials, SMUD's state delegation, federal and tribe representatives and appropriate agency staff to provide initial contact and ongoing communications by email and phone with messages for their constituents.

In the time leading up to a potential or imminent de-energization event or emergency, SMUD makes every effort to maintain contact with customers it believes may be impacted and keep the media, local agencies and the public aware of the number of customers affected and SMUD's activities and restoration efforts.

Key stakeholders and public safety partners, including potentially impacted federal, state, and local elected officials, City and County executive staff, tribe representatives and first responders are also contacted via a variety of channels. SMUD has specific personnel assigned to elected officials and agencies, and to critical customers including water and telecommunications utilities potentially affected by de-energized powerlines.

7.2.1 Event communications

Whenever possible, SMUD will provide potentially impacted customers with notice before implementing any de-energization action, using all available channels to reach customers and other stakeholders with outage information. Sudden onset of emergency conditions could impact SMUD's ability to provide advanced notice to customers.

SMUD sends automated pre-recorded phone calls to customers in the impacted areas/neighborhoods advising when the outage is called and directs them to smud.org/outages for up-to-date information. SMUD.org is updated with features to further enhance customer communications before and during de-energization events.

The SMUD Contact Center's Interactive Voice Response (IVR) will have real-time recorded information informing each group of customers that may be impacted before the de-energizations begin. Messages will be customized and updated as needed for each specific event.

7.2.2 Public safety partners, government agencies, tribes, and critical infrastructure providers

De-energization is a last resort to maintain public and customer safety during extreme fire risk conditions. If extreme fire danger resulted in de-energization or planned rotating outages, SMUD will provide proactive communications to alert key stakeholders and essential service providers and provide as much notice as possible to minimize the impact on our customers and community.

The following customer categories are considered essential and/or critical service providers:

- Jurisdictions providing essential fire, police and prison services
- Government agencies essential to national defense
- Hospitals, assisted living and skilled nursing facilities
- Communication utilities, as they relate to public health, welfare and security, including telephone utilities
- Radio and television broadcasting stations used for broadcasting emergency messages, instruction, and other public information related to the electric curtailment emergency
- Water and sewage treatment utilities identified as necessary for services such as firefighting

SMUD interacts regularly with executive staffs, elected officials, other government representatives and key critical infrastructure customers to keep them updated on its wildfire mitigation efforts. SMUD also works closely with staff members in various departments of regional and local governments, public utilities, nonprofits and other service providers on collaborative strategies and partnership opportunities.

Examples of SMUD's communication and engagement initiatives include:

- Regular in-person briefings with federal, state, and local elected officials and key staff on wildfire risk mitigation and other utility-related issues with comprehensive "leave-behind" materials.
- Meetings with regional and local government staff and elected officials focused on individual districts, communities and neighborhoods and mitigation opportunities.

- Regular in-person and/or digital communication with critical facilities and key customers through SMUD Strategic Account Advisors.
- Interagency projects, collaborative staff training efforts and regular communication with first responders and essential service providers.
- Cross-SMUD participation with the El Dorado County Wildfire Mitigation Stakeholder Group and at other El Dorado County government, public and community meetings.
- Ongoing communication, collaboration and support for local Fire Safe Councils and other fire prevention agencies and nonprofits.

8 Restoration of service

If a transmission or distribution line has been de-energized in anticipation of a wildfire threat, SMUD troubleshooters or patrollers must perform multiple steps prior to re-energization. In an event of a wildfire where distribution poles or transmission structures were burned, additional steps must be taken to rebuild the lines.

8.1 Steps to restoration of service

SMUD work crews must take several important steps prior to restoring electrical service after a de-energization event.

- **Patrol.** SMUD crews patrol the line to look for vegetation in lines and any obvious damage that may prevent safe energization. Depending on the length of the lines, and number of circuits, the patrols can take a several hours to days to complete.
- **Repair.** During patrol, crews look for potential damage to the lines and poles. Where equipment damage is found, additional crews are dispatched with new materials to repair or replace damaged equipment. In some cases, VM crews may be called in to help clear an area of downed trees or branches that have fallen into the power lines while it was de-energized.
- **Test.** Once the lines and poles are safe to operate, crews test the infrastructure by closing the fuse, or breaker to re-energize the line segment.
- **Restore.** Power is restored and the outage communication system provides notification of power restoration to customers.

8.2 Reconstruction after a wildfire

When infrastructure is damaged during a wildfire event, a lot of work is required to plan and execute the rebuilding effort. After local police and fire officials have given SMUD clearance, SMUD work crews can proceed with the assessment and rebuilding effort.

- **Assessment.** SMUD crews must patrol each line segment to determine the extent of damage that has occurred. The patrol involves assessing equipment damage, access issues, any cleanup/debris removal issues and determining personal protective equipment requirements for the crews. SMUD works with the local agency in charge of the fire to access impacted areas as soon as the area is deemed safe by fire officials. During this phase the VM team assesses vegetation damaged by the wildfire that could impact SMUD's facilities.
- **Planning.** After the initial assessment, SMUD supervisors, managers and engineers meet to plan the restoration. The team will work with system operations to prioritize the restoration efforts, targeting the circuits that serve the most critical infrastructure needs.
- **Mobilize.** Based on the size and complexity of the rebuild/restoration efforts, SMUD will coordinate the crews and material needs internally if possible. Mutual aid and contractors may be used on an "as needed" basis to provide additional support. VM crews will begin clearing the ROW and any dangerous trees that pose a threat to the restoration crews. SMUD maintains a critical material vendor list and has contracts it can draw on for labor and material needs; though in an instance of widespread catastrophic damage, necessary materials and labor could experience shortages that may delay work.
- **Rebuild.** The rebuild effort lead by SMUD will commence as soon as areas become safe and accessible. The lines will be rebuilt with a mix of temporary and/or permanent structures as determined during planning. The initial efforts will be to get the lines up and restore the damaged circuits. Depending on the extent of damage, demolition may be performed concurrently or after crews start installing new facilities. SMUD will incorporate new materials and technologies as indicated and available.

- **Restore.** SMUD, mutual aid, or contract crews will restore electric services to our customers as soon as possible after the wildfire. Depending on the extent of damages, customers may have to perform repairs on their facilities and pass inspections by local agencies prior to having full electric service restored. These are coordinated on an as needed basis.

9 Performance metrics and monitoring

This section identifies SMUD’s management responsibilities for overseeing this WMP and includes the operating departments and teams responsible for carrying out the various activities described in the previous chapters. This section also identifies the metrics which are used to monitor and audit the effectiveness of this WMP.

9.1 Effectiveness of the WMP

In the initial WMP, SMUD staff identified metrics that met the criteria of PUC 8387. These identified metrics were general in nature. Since those initial metric criteria were identified, the wildfire planning process has continued to develop, and SMUD has received independent evaluation of its WMP. In response to the industry’s maturing understanding of wildfire metrics and recommendations received, SMUD undertook a multi-step effort to identify new metrics that can better gauge the success of its many programs and mitigation activities outlined in the WMP.

The first step in this multi-step effort was to assess, identify and establish useful metrics that best measure the activities related to minimizing the probability that SMUD’s transmission and distribution system may be the origin or contributing source for the ignition of a wildfire. Metrics identified in this section are measures of quantitative assessment that will be used for assessing, comparing, and tracking performance of the programs and efforts identified in this WMP. This step was completed and reflected in the metrics identified in this WMP.

The second step is to define the benchmarks associated with the metrics. The purpose of these benchmarks is to establish criteria to measure performance of the various activities. Some activities can be measured with specific units of work that are forecasted at the beginning of a year, such as quantities of inspected units etc. Progress towards these forecasted units would indicate on- or off-track completion cadence, which can be adjusted as needed during the year. Other metrics are identified to count uncontrollable units that indicate performance of the grid, such as outage event counts or number of corrective action findings. Development of these benchmarks will require several years of data to determine trendlines and averages. Data collection for the new metrics began in 2021. Following existing practices, SMUD anticipates five years of data will be required to establish the benchmarks, with a target period in 2026.

The third and final step is to determine or define the percentage reduction targets against the benchmarks. Percent reductions against benchmarks would need to be realistic, and not easily achievable. SMUD anticipates the initial benchmarks would require fine adjustments periodically to ensure continued effort towards risk reduction activities. These benchmarks and adjustments will be reflected in SMUD’s annual WMP updates.

9.1.1 *Metrics and assumptions for measuring WMP performance*

SMUD will track the following metrics to measure the performance of this WMP, and its effectiveness in reducing catastrophic wildfire. These new set of metrics are more granular and targeted towards specific maintenance activities that can more closely be tied to performance of the WMP.

Work is identified in annual work plans authorized on an executive level, and work that remains incomplete will be flagged in future work plans. Work may be field-verified and open work notifications are regularly reviewed to allow management to prioritize work in accordance with current risks. SMUD’s target is always to complete 100 percent of the work within the initially scheduled time frame. However, emergencies or other unforeseen contingencies can occur that require material and labor resources to be otherwise assigned. In this instance delayed work will be prioritized in following time periods. All work is completed within time periods to allow for the safe and reliable operation of the electric system in accordance with applicable requirements and industry standards.

The Inspection Program Performance metrics shown in Table 8 are based on inspection activities for targeted areas. These are key performance indicators (KPI) based metrics, with specific targets for completion within a year.

Table 8 Inspection Program Performance

Inspection Program Performance (KPI)	Target
Number of poles inspected from DLI, Distribution, PCA	≥95%
Number of structures inspected from Patrol, Transmission, PCA	≥95%
Number of structures inspected from Patrol, Transmission, HFTD Tier 3	≥95%
Percentage of circuit miles inspected for vegetation compliance, Distribution, HFTD Tier 2	≥95%
Percentage of circuit miles inspected for vegetation compliance, Transmission, PCA	≥95%
Percentage of circuit miles inspected for vegetation compliance, Transmission, HFTD Tier 3	≥95%
Number of aerial Flight Patrols, Visual, UARP	2
Number of aerial Flight Patrols, Infrared, UARP	1
Number of aerial Flight Patrols, 12kV, Infrared, PCA	1
VM Quality Control for Transmission, UARP	≥95%
Number of trees trimmed or removed, normal activities, UARP	≥95%

9.1.2 Outcome Metrics

Two sets of outcome metrics were identified that measure performance of the grid. These metrics replace the more general “ignition events” identified in previous WMPs, which couldn’t directly be tied to risk categories. The outcome metrics shown in Table 9 are consistent with GO95 Rule 18¹¹ repair priority levels.

Table 9 Grid Condition Findings

Grid Condition Findings (Non KPI)
Number of GO95 Rule 18 Level 1 findings, Distribution, PCA
Number of GO95 Rule 18 Level 1 findings, Distribution, HFTD Tier 2
Number of GO95 Rule 18 Level 1 findings, Distribution, HFTD Tier 3
Number of GO95 Rule 18 Level 1 findings, Transmission, PCA
Number of GO95 Rule 18 Level 1 findings, Transmission, HFTD Tier 2
Number of GO95 Rule 18 Level 1 findings, Transmission, HFTD Tier 3
Number of GO95 Rule 18 Level 2 findings, Distribution, PCA
Number of GO95 Rule 18 Level 2 findings, Distribution, HFTD Tier 2
Number of GO95 Rule 18 Level 2 findings, Distribution, HFTD Tier 3
Number of GO95 Rule 18 Level 2 findings, Transmission, PCA
Number of GO95 Rule 18 Level 2 findings, Transmission, HFTD Tier 2
Number of GO95 Rule 18 Level 2 findings, Transmission, HFTD Tier 3
Number of GO95 Rule 18 Level 3 findings, Distribution, PCA
Number of GO95 Rule 18 Level 3 findings, Distribution, HFTD Tier 2
Number of GO95 Rule 18 Level 3 findings, Distribution, HFTD Tier 3
Number of GO95 Rule 18 Level 3 findings, Transmission, PCA
Number of GO95 Rule 18 Level 3 findings, Transmission, HFTD Tier 2
Number of GO95 Rule 18 Level 3 findings, Transmission, HFTD Tier 3

The second set of outcome metrics are a measure of the ignition drivers during fire season, shown in Table 10.

Table 10 Drivers of Ignitions

Drivers of Ignitions, fire season only (Non KPI)
Number of wire downs, inside PCA
Number of Overhead Outage Events caused by animals, inside PCA
Number of Overhead Outage Events caused by foreign material, inside PCA
Number of Overhead Outage Events caused by Vegetation - Tree Preventable, inside PCA
Number of Overhead Outage Events caused by Vegetation - Tree Non-Preventable, inside PCA

¹¹ <https://ia.cpuc.ca.gov/gos/Resmajor/DesNo09-08-029/GO95/DesNo09-08-029-Rule%2018.htm>.

9.1.3 Enhancement Projects

Once a project or program is approved, it is planned for execution based on the upcoming year’s work schedule. The targets listed here for the approved projects are monitored via milestone achievements.

Table 11 System enhancement capital project performance

Project (KPI)	Target
Number of poles completed, PCA, Hardware Replacement	>=95%
Circuit feet completed, PCA, #6CU Reconductor	>=95%
Units of trees pruned or removed, Wildfire Mitigation Vegetation Management work, UARP	>=95%
Number of SCADA reclosers installed, PCA	>=95%

9.1.4 Community Outreach Measures

SMUD reaches out to customers, local communities, and government agencies for multiple programs. Metrics were developed specific to wildfire mitigation efforts and communication. The various type of community outreach measures is shown in Table 12.

Table 12 Community Outreach Programs

Community Outreach Programs (non KPI)
Number of contacts with Federal, State and Local Govt offices, specific to wildfire or de-energization related contacts
Number of mailers sent to customers related to Wildfire Mitigation Activities, Email, MED rate
Number of mailers sent to customers related to Wildfire Mitigation Activities, Email, Senior ID
Number of mailers sent to customers related to Wildfire Mitigation Activities, Direct Mail, MED rate
Number of mailers sent to customers related to Wildfire Mitigation Activities, Direct Mail, Customer Connection

9.2 Monitoring and auditing of the WMP

The WMP will be reviewed annually. This annual review will align with SMUD’s existing business planning process. This review will include an assessment of the WMP programs and performance. SMUD’s business planning process includes budgeting and strategic planning for a 3-5-year planning horizon.

9.2.1 Identify deficiencies in the WMP

At any point in time when deficiencies are identified, the COO or their delegates are responsible for correcting the deficiencies.

9.2.2 Written processes and procedures

The operational areas conduct their work according to written processes and procedures. Processes and procedures are developed with contributions by specific teams and updated when a need arises. Having written processes and procedures provides for consistency in the execution of programs and activities while enabling employee safety.

9.2.3 Monitor and audit the effectiveness of inspections

SMUD has existing quality control processes embedded into its existing general practice. However, for certain programs, there is a formal quality control process. The following depicts a few of these programs.

9.2.3.1 Distribution system inspections

SMUD's maintenance planning group manages T&D line and substation assets. A key component in managing assets is the development of comprehensive inspection and maintenance programs. The maintenance planning group develops inspection and maintenance programs driven by the need to ensure the safe operation of T&D line and substation facilities, reduce risk of power-related wildfire, meet federal and state regulatory requirements, achieve reliability performance within mandated limits and optimize capital and operations & maintenance (O&M) investments. In addition, this group regularly monitors inspection and corrective maintenance records, as well as diagnostic test results to adjust maintenance plans and develop new programs. SMUD uses best industry practices in developing its maintenance plans.

SMUD's inspection and maintenance programs focus on the following objectives:

- Ensure employee and public safety
- Minimize risk of wildfire posed by power lines and equipment
- Maintain regulatory and SMUD policy compliance
- Improve the availability and reliability of the system
- Employ industry best practices
- Extend the useful life of equipment
- Minimize the total cost of equipment ownership

The maintenance planning group develops and issues annual inspection work plans during the last quarter of the current year for the following year, which are maintained in SMUD's Enterprise Asset Management (EAM) system.

SMUD's Grid Assets Department is responsible for performing the inspections and corrective maintenance. When deficiencies in SMUD facilities are identified, corrective maintenance notifications are created in SAP. The priority for corrective maintenance is to remove safety hazards immediately and repair deficiencies according to the type of deficiency, severity and HFTD tiers. Inspection notifications are monitored throughout the year to ensure timely completion via regular internal reports using SAP data. Enterprise applications are used to deploy, visualize, and validate work based on business rules. These applications provide the visibility and monitoring of work required to make informed decisions and to achieve compliance with our inspection and maintenance programs.

9.2.3.2 Vegetation management (VM)

SMUD's vegetation pruning/removal activities are performed by contractors. The contractors are quality audited by SMUD (VM) personnel. Distribution system related work and contractors are field audited and approximately 7% of the tree work (pruning and removal) is reviewed. This quality assurance (QA) effort is tracked to monitor program effectiveness and overall tree work performance. For transmission, SMUD VM staff perform a quality control (QC) audit of 100% of the transmission system related maintenance work performed by the contractor. For both T&D QC efforts all deficiencies are reissued to the contractor management team and corrective action is required.

9.2.4 Internal audit

SMUD's internal audit department, known as Audit and Quality Services (AQS) provides independent, objective assurance and consulting services to the Board of Directors and management designed to add value and improve SMUD's operations. The AQS mission is to enhance and protect organizational value by providing risk-based and objective assurance advice and insight.

The work of AQS provides reasonable assurance regarding the achievement of objectives in the following areas:

- Adherence to plans, policies and procedures

- Compliance with applicable laws and regulations
- Effectiveness and application of administrative and financial controls
- Effectiveness and efficiency of operations
- Reliability of data
- Safeguarding assets
- Accuracy of the SD monitoring reports

As part of AQS' process to develop its annual audit plan, AQS considers all enterprise risks and performs audits over a selection of processes across electric T&D as well as substation assets on a periodic basis.

10 Appendix

This section contains supporting information to the document.

10.1 Definitions

Distribution System Operations (DSO): SMUD's DSO personnel is responsible for directing the safe and reliable operation of SMUD's distribution system while operating within current policies and procedures during normal and emergency situations. Distribution system operators prepare, check, and administer the execution of safe and reliable switching procedures. DSO will monitor and maintain equipment loading levels to prevent damage to equipment. This group is also responsible for updating outage information timely and accurately so that information can be provided to internal and external customers.

*Fire Hazard*¹²: "Hazard" is based on the physical conditions that give a likelihood that an area will burn over a 30 to 50-year period without considering modifications such as fuel reduction efforts.

*Fire Risk*¹: "Risk" is the potential damage a fire can do to the area under existing conditions, including any modifications such as defensible space, irrigation and sprinklers and ignition resistant building construction which can reduce fire risk. Risk considers the susceptibility of what is being protected.

Hardening: Modifications to electric infrastructure to reduce the likelihood of ignition and improve the survivability of electrical assets.

*High Fire Threat District (HFTD)*¹³: The HFTD identifies areas of elevated and extreme fire risk related to electric utility facilities. These areas are reflected in a map adopted by the CPUC after an extensive public process. It is a composite of two maps:

1. Tier 1 High Hazard Zones (HHZs) on the U.S. Forest Service - CAL FIRE joint map of Tree Mortality HHZs ("Tree Mortality HHZ Map"). Tier 1 HHZs are zones in direct proximity to communities, roads, and utility lines and are a direct threat to public safety.
2. Tier 2 and Tier 3 fire-threat areas on the CPUC Fire-Threat Map. Tier 2 fire-threat areas depict areas where there is an elevated risk (including likelihood and potential impacts on people and property) from utility associated wildfires. Tier 3 fire-threat areas depict areas where there is an extreme risk (including likelihood and potential impacts on people and property) from utility associated wildfires.

Pole Clearing Area (PCA): SMUD defined area where poles with non-exempt equipment have annual vegetation clearing and/or pruning within a 10-foot radius in compliance with PRC 4292 prior to the start of fire season, currently May 1 of each year. The custom defined PCA boundary includes SRA boundary and adjacent areas with similar vegetation, and portions of a Local Responsibility Area (LRA) in the southern part of Sacramento County. This boundary area exceeds the current SRA boundary due to similar vegetation and risk of ignition. Overhead electrical facilities crossing into and within the boundary of the PCA fall under special operating conditions and fall under enhanced maintenance programs.

Power System Operations (PSO): SMUD's PSO personnel analyze, direct, monitor, control and/or operate SMUD's gas pipelines and electric generation and transmission systems and associated facilities in a safe, reliable, and efficient manner during routine and emergency situations. This position has the responsibility and authority to support and implement real-time actions.

*Red Flag Warning (RFW)*¹⁴: A term used by fire-weather forecasters to call attention to limited weather conditions of particular importance that may result in extreme burning conditions. It is issued when it is an on-

¹² Source: http://www.fire.ca.gov/fire_protection/downloads/siege/2007/Overview_Glossary.pdf

¹³ Source: <http://www.cpuc.ca.gov/FireThreatMaps/>

¹⁴ Source: <https://w1.weather.gov/glossary/index.php?word=red+flag+warning>

going event, or the fire weather forecaster has a high degree of confidence that Red Flag criteria will occur within 24 hours of issuance. Red Flag criteria occurs whenever a geographical area has been in a dry spell for a week or two, or for a shorter period, if before spring green-up or after fall color, and the National Fire Danger Rating System (NFDRS) is high to extreme and the following forecast weather parameters are forecasted to be met:

- A sustained wind average 15 mph or greater
- Relative humidity less than or equal to 25 percent; and
- A temperature of greater than 75 degrees F

In some states, dry lightning and unstable air are criteria. A Fire Weather Watch may be issued prior to the RFW.

*State Responsibility Area (SRA)*¹: “The California Board of Forestry and Fire Protection classify areas in which the primary financial responsibility for preventing and suppressing fires is that of the state. California Department of Forestry (CDF) has SRA responsibility for the protection of over 31 million acres of California’s privately-owned wildlands.”

Transmission and Distribution (T&D): At SMUD, for line maintenance purposes, the transmission system includes 230 kV, 115 kV, and dedicated 12 kV, 21 kV and 69 kV lines tying generation facilities to bulk or transmission substations. The distribution system includes 69 kV, 21 kV, 12 kV, and 4 kV lines serving distribution substations and customers.

*Wildfire*¹⁵: An unplanned, unwanted fire in an area in which development is essentially non-existent, except for roads, railroads, powerlines, and similar transportation facilities and structures, if any, are widely scattered (“wildland”), including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

10.2 References

- CPUC Fire Threat Map, https://www.cafirefoundation.org/cms/assets/uploads/2020/05/CPUC_Fire-Threat_Map_final.pdf
- Public Utilities Code, Chapter 6. Wildfire Mitigation [8387], http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=8387&lawCode=PUC
- County Maps of Fire Hazard Severity Zones in SRA, <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>
- General Order 95¹⁶ contains rules for the design, construction, maintenance, inspection, repair, and replacement of overhead utility lines. <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K464/209464026.pdf>
- General Order 165¹⁶, Inspection Requirements for Electric Distribution and Transmission Facilities. <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K552/209552704.pdf>
- General Order 166¹⁶, Standards for Operation, Reliability and Safety During Emergencies and Disasters <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K451/209451792.pdf>
- General Order 174¹⁶, Rules for Electric Utility Substations <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M031/K879/31879476.PDF>
- Power Line Fire Prevention Field Guide <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildfire-prevention-engineering/prevention-field-guides/>

¹⁵ Source: <https://www.nwcg.gov/term/glossary/wildfire>

¹⁶ SMUD is not subject to CPUC jurisdiction, but has developed design standards, and maintenance programs that meet or exceed the standards in GO 95, GO 128, GO 165, GO 166, and GO 174.

10.3 Acronym glossary

AAM (After-Action Meeting)

AAR (After-Action Report)

AB (Assembly Bill)

AEU (Amador-El Dorado Unit)

AI (Artificial Intelligence)

ANSI (American National Standards Institute)

AQS (Audit and Quality Services)

CAISO (California Independent System Operator)

CAL FIRE (California Department of Forestry and Fire Protection)

CalOES (California Governor's Office of Emergency Services)

CDF (California Department of Forestry)

COO (Chief Operating Officer)

CPUC (California Public Utilities Commission)

CUEA (California Utilities Emergency Association)

DLI (Detailed Line Inspections)

DSO (Distribution System Operations)

EAM (Enterprise Asset Management)

EOC (Emergency Operations Center)

EOP (Emergency Operations Plan)

EP (Emergency Preparedness)

ERM (Enterprise Risk Management)

EROC (Enterprise Risk Oversight Committee)

FAC (Facilities Design, Connections and Maintenance)

FHSZ (Fire Hazard Severity Zone)

FRAP (Fire Resource and Assessment Program)

GHG (Greenhouse gas)

GIS (Geographic Information System)

GO (General Order)

HFTD (High Fire Threat Districts)

HHZ (High Hazard Zone)

HSEEP (Homeland Security Exercise and Evaluation Program)

ID (Identification)

IOU (Investor-owned Utility)

IP (Improvement Plan)

IR (Infrared)

IVM (Integrated Vegetation Management)

IVR (Interactive Voice Response)

kV (Kilovolt)

kWH (Kilowatt Hours)

LIDAR (Light Detection and Ranging)

LRA (Local Responsible Area)

MED (Medical Equipment Discount)

MVCD (minimum vegetation clearance distance)

MW (Mega Watts)

NASA (National Aeronautics and Space Administration)

NFDRS (National Fire Danger Rating System)

O&M (Operations & Maintenance)

OES (Office of Emergency Services')

PCA (Pole Clearing Area)

PG&E (Pacific Gas & Electric)

PRC (Public Resources Code)

PSO (Power System Operations)

PSPS (Public Safety Power Shutoff)

PUC (Public Utilities Code)

QA (Quality Assurance)

QC (Quality Control)

QIE (Qualified Independent Evaluator)

RFW (Red Flag Warning)

ROW (rights-of-way)

SAP (Systems Applications and Products)

SB (Senate Bill)

SD (Strategic Direction)

SEMS (Standardized Emergency Management System)

SME (Subject Matter Expert)

SOC (State Operations Center)

SRA (State Responsibility Area)

T&D (Transmission and Distribution)

TTX (Tabletop Exercise)

UARP (Upper American River Project)

VM (Vegetation Management)

WAPA (Western Area Power Administration)

WMP (Wildfire Mitigation Plan)

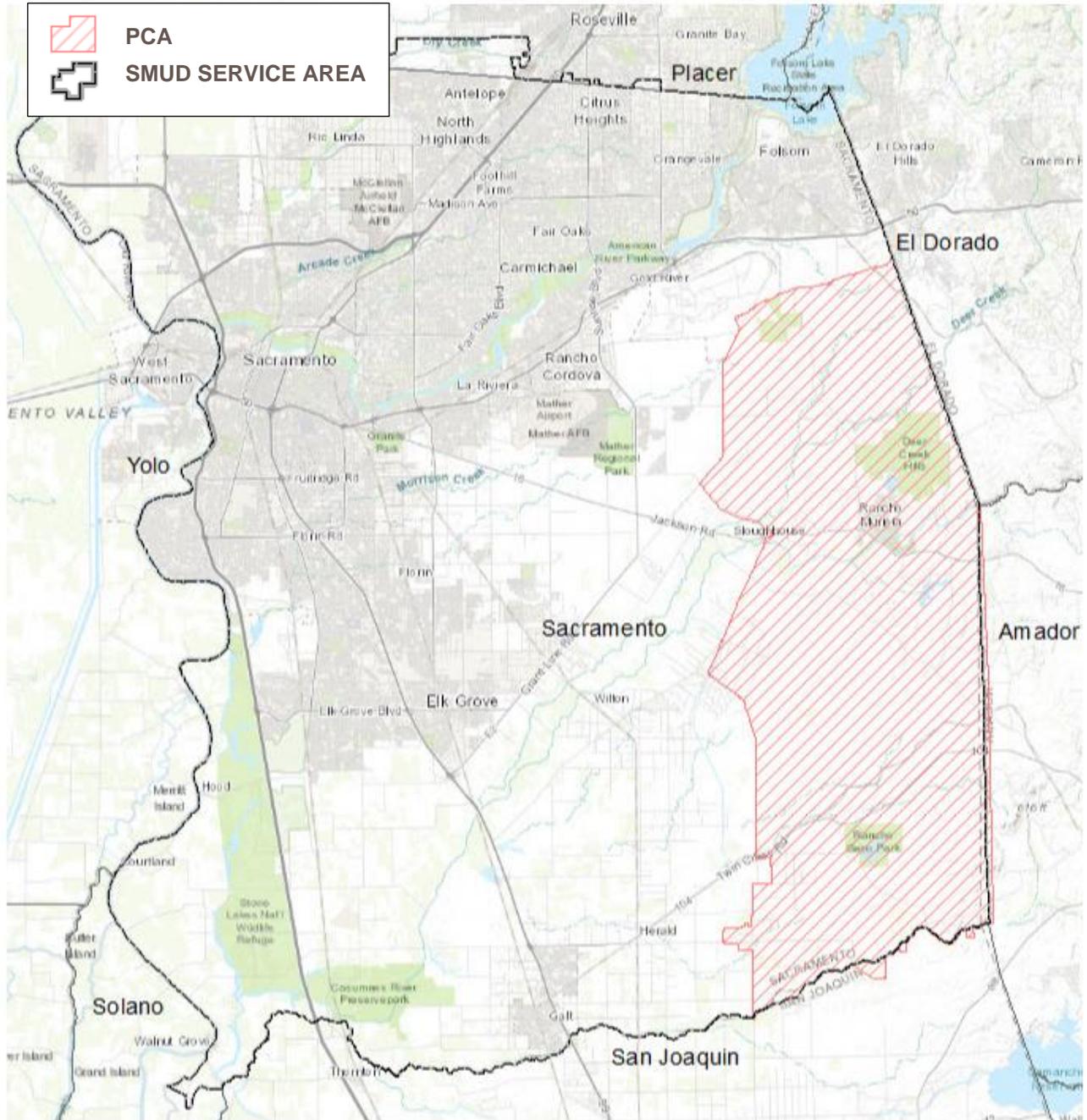
WSAB (Wildfire Safety Advisory Board)

WUI (Wildland-Urban Interface)

10.4 Reference for SMUD plans

10.4.1 SMUD's Pole Clearing Area Map

Figure 7 SMUD's Pole Clearing Area with respect to SMUD's service area boundary





2023 Independent Evaluation of Sacramento Municipal Utility District's 2023-2025 Wildfire Mitigation Plan

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Sacramento Municipal Utility District



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May 30, 2023

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Executive Summary

Sacramento Municipal Utility District (SMUD) contracted with Guidehouse Inc. (Guidehouse) to engage in an independent evaluation of its Wildfire Mitigation Plan (Plan or WMP). This independent evaluation report (Report) describes the technical review and evaluation provided by Guidehouse. Guidehouse performed this evaluation in May 2023 and finalized the Report on May 30, 2023. Guidehouse's project team reviewed detailed information related to the Plan and assessed SMUD's procedures related to the Plan.

The Plan was prepared as a response to Senate Bill (SB) 901. SB 901 included a number of provisions and directives, among which includes the requirement for electric utilities to prepare and adopt WMPs and revise and update the Plan annually thereafter. These requirements are codified in the California Public Utilities Code (PUC) Section 8387 for publicly owned utilities (POUs).

Guidehouse evaluated the Plan based on the statutory requirements of PUC Section 8387 as it relates to POUs. This PUC Section was amended in 2019 with the signing of California's Assembly Bill (AB) 1054 into law. The POUs are now subject to the guidance provided by the California Wildfire Safety Advisory Board and mandatory cyclical reviews, including a comprehensive update every three years. The required elements for a WMP have not been modified by this new legislation. This Report meets SMUD's requirements under PUC Section 8387(c), which mandates an independent evaluation of SMUD's WMP. The Report was also developed to satisfy the statutory requirement for public review. This Report underlies the required presentation at a public meeting of the SMUD Board on June 14, 2023, for comments before and approval. The Report includes the following:

- Background of the legislative history requiring WMPs and their independent evaluations
- Approach and methodology evaluating the WMP's comprehensiveness
- SMUD's WMP elements and their compliance with SB 901 and PUC Section 8387 WMP elements and directives
- An evaluation of the WMP's presented metrics to assess the effectiveness of the overall WMP
- Determinations and results

Based on relevant experience in grid hardening and resiliency, natural disaster response, prior experience in WMP development, and active tracking of wildfire legislative and regulatory proceedings, Guidehouse has concluded that SMUD's WMP is comprehensive in accordance with PUC section 8387.

1. Background

In recent years, California has seen numerous utility equipment-involved, catastrophic wildfires. The unique geographic profile of California and the impacts of climate change, including prolonged drought, high winds, and elevated temperatures, have led to elongated fire seasons. The state also has historically high levels of past fire suppression efforts. This increasingly abundant dry vegetation is the leading driver of wildfires. These fuel-rich environments, coupled with intensified climatological conditions with high wind gusts and inherent electrical infrastructure risks, produce the conditions conducive to potential wildfire ignition. The three attributes that provide optimal conditions for a fire ignition are illustrated through the graphic in Figure 1-1.

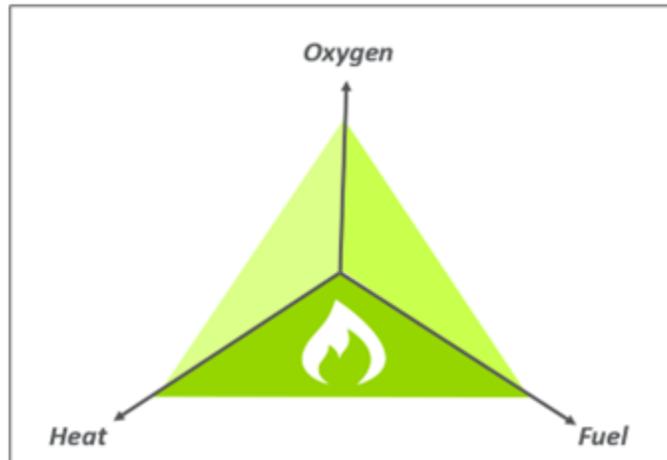


Figure 1-1 – Fire Triangle

Disastrous wildfire threat is a well-known and shared priority among electric utilities in California. Disastrous utility-involved wildfire incidents and the significant financial and livelihood impacts associated with them led California legislators and regulators to formalize requirements to ensure safe operations of electric utility equipment and greater investment in wildfire mitigation efforts. Specifically, the state has approved legislation that strengthens governmental and regulatory oversight of wildfire prevention implementation activities, utility wildfire mitigation plans, and proper dispersal of state funds to wildfire victims. In an effort to minimize future devastating occurrences through risk-driven wildfire prevention, electric utilities, including cooperatives, were mandated, by SB 901 (Senator Bill Dodd, 2018), to prepare and annually adopt a wildfire mitigation plan. This effort is foundational to the state's prioritized goal of minimizing the potential of devastating fires in future years.

1.1 Wildfire Mitigation Plans

1.1.1 SB 901

In an effort to minimize future devastating occurrences through risk-driven wildfire prevention, electric utilities, including publicly owned utilities (POUs), were mandated, by Senate Bill (SB) 901 to prepare and annually adopt a WMP. The WMPs must include several mitigation and response elements in each utility's strategies, protocols, and programs. The requirements for POUs are codified in Public Utilities Code (PUC) Section 8387. Details relating to POU requirements are discussed in Section 2 of this WMP evaluation report (Report).

1.1.2 AB 1054 Statutory Modifications

In 2019, Assembly Bill (AB) 1054 was signed into law, modifying the requirements for POU WMPs. AB 1054 aims to mitigate the intensity of wildfire impacts through several initiatives separate from those actions required of electric utilities. AB 1054 includes directives to establish the Wildfire Safety Division¹ at the California Public Utilities Commission and the state's Wildfire Safety Advisory Board (WSAB). AB 1054 requires POUs submit their WMPs by July 1 of each year for review by and recommendations from WSAB and requires POUs to comprehensively update their WMPs at least every three years. The most recent *Guidance Advisory Opinion for 2022 POU WMPs* was published on March 2, 2022.

1.2 Sacramento Municipal Utility District Plan Preparation

SMUD is headquartered in Sacramento, California and owns and operates an electric system that has provided retail electric service since 1946. Its territory resides within a 900-mile area and it serves a population of about 1.5 million people. SMUD is a publicly owned utility that is governed by a seven-member popularly elected Board of Directors. SMUD owns a vertically integrated electric system which includes generation, transmission, and distribution facilities.

SMUD prepared its first WMP pursuant to SB 901 directives in 2019. In 2019, SMUD conducted extensive stakeholder outreach during its preparation of the initial WMP including meeting with local fire agencies and fire safe councils, Office of Emergency Services, and healthcare organizations. In addition, SMUD invited federal, state, and local agencies, representatives of utilities, telecommunication providers, and critical care customers to attend stakeholder outreach meetings where information regarding the preparation and contents of the WMP were provided. Updates to the plan are presented to and adopted by the Board at a noticed public meeting annually.

1.2.1 Independent Evaluation Services

PUC Section 8387(c) directs POUs to procure an independent evaluation (IE) of the comprehensiveness of the WMP. The provisions of PUC Section 8387 state that the "qualified independent evaluator" shall be experienced in "assessing the safe operation of electrical infrastructure" and will perform an assessment to determine the comprehensiveness of the WMP.

Accordingly, SMUD sought IE services to assess the comprehensiveness of its WMP pursuant to PUC Section 8387(c). SMUD selected Guidehouse to perform this assessment based on Guidehouse's prior experience with assessing the safe operation of electrical infrastructure, including grid-hardening and WMPs, with an emphasis on electrical equipment, public, and personnel safety. Guidehouse has conducted over 12 independent evaluations of POUs across California and is a California Office of Energy Infrastructure Safety ("Energy Safety") designated qualified independent evaluator for the last two years, and as such has conducted six independent evaluations of three CA IOUs.

This Report presents the results of Guidehouse's WMP IE.

¹ Oversight and responsibility for the Wildfire Safety Division was transferred from the California Public Utilities Commission to the California Natural Resources Agency on July 1, 2021 and is now known as the Office of Energy Infrastructure Safety.

2. Evaluation Scope and Approach

Guidehouse completed this evaluation based on industry standard practices, our experience performing independent evaluations of WMPs, our active tracking of wildfire regulatory proceedings, WSAB guidance, and, most importantly, a comparison of the specific criteria in PUC Section 8387(b)(2) to the specific wildfire-related plans outlined in SMUD's WMP.

2.1 Evaluation Parameters

2.1.1 WMP Requirements

Table 2-1 lists the requirements for the statutory requirements for POUUs to address in their WMPs.

Table 2-1 – POU Requirements

PUC Section 8387
(a) Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.
(b) (1) The local publicly owned electric utility or electrical cooperative shall, before January 1, 2020, prepare a wildfire mitigation plan. After January 1, 2020, a local publicly owned electric utility or electrical cooperative shall prepare a wildfire mitigation plan annually and shall submit the plan to the California Wildfire Safety Advisory Board on or before July 1 of that calendar year. Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan.
(2) The wildfire mitigation plan shall consider as necessary, at minimum, all of the following:
(A) An accounting of the responsibilities of persons responsible for executing the plan.
(B) The objectives of the wildfire mitigation plan.
(C) A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.
(D) A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.
(E) A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.
(F) Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.
(G) Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.
(H) Plans for vegetation management.
(I) Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.

(J) A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following:

(i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility's or electrical cooperative's equipment and facilities.

(ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.

(K) Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire-threat district based on new information or changes to the environment.

(L) A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.

(M) A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.

(N) A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following:

(i) Monitor and audit the implementation of the wildfire mitigation plan.

(ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.

(iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.

(3) The local publicly owned electric utility or electrical cooperative shall, on or before January 1, 2020, and not less than annually thereafter, present its wildfire mitigation plan in an appropriately noticed public meeting. The local publicly owned electric utility or electrical cooperative shall accept comments on its wildfire mitigation plan from the public, other local and state agencies, and interested parties, and shall verify that the wildfire mitigation plan complies with all applicable rules, regulations, and standards, as appropriate.

(c) The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The independent evaluator shall issue a report that shall be made available on the internet website of the local publicly owned electric utility or electrical cooperative, and shall present the report at a public meeting of the local publicly owned electric utility's or electrical cooperative's governing board.

2.1.2 Industry Knowledge and Regulatory Proceedings

The state's priority towards abating future catastrophic wildfire events is demonstrated through aggressive measures, directing utilities to enhance their protocols for fire prevention, public communications, and response. That collection of information is presented in a comprehensive WMP. Guidehouse tracks state proceedings and routinely advises, assesses, and guides utility wildfire mitigation efforts. Accordingly, we reviewed SMUD's WMP against the provisions in PUC § 8387 and relative to its risk profile which includes, but is not limited to, its topography, climate, assets, and structure.

2.2 Evaluation Approach

Guidehouse assessed the comprehensiveness of the plan against the applicable regulations to determine whether SMUD meets the standard set forth in PUC § 8387(c).

2.2.1 Statutory Compliance

Guidehouse sought to determine compliance with the provisional requirements laid out in SB901 as codified in PUC Section 8387. The WMP's alignment with the statutory requirement is presented in Appendix A. SMUD's mitigation measures are not required to exceed the statutory requirements.

2.2.2 Industry Wildfire Mitigation Practices Comparison

Guidehouse's understanding of an effective WMP draws on comparisons from existing WMPs and industry practices, WSAB guidance, risk profile, and mitigation strategy. This mitigation strategy analysis is visually summarized in Figure 2-1.

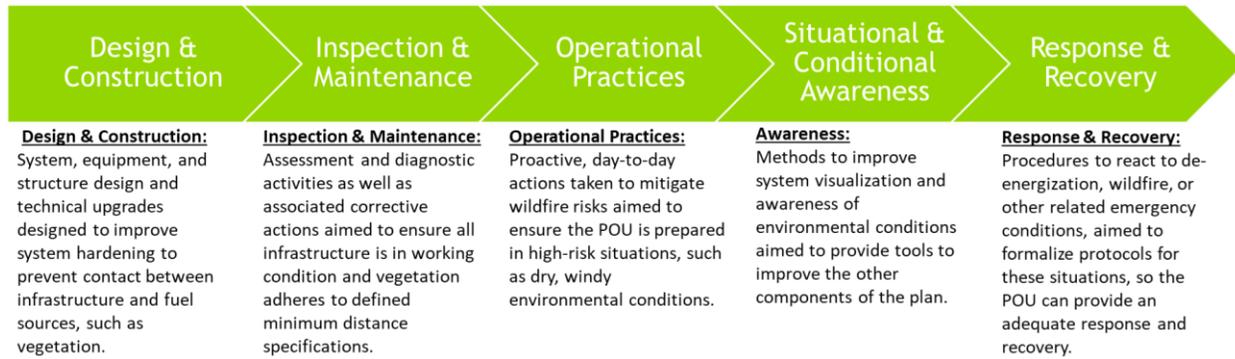


Figure 2-1 – Mitigation Strategy Overview

These critical elements are evaluated as part of Guidehouse's review of the comprehensiveness of SMUD's WMP. This evaluation includes a consideration that not all of these strategies are necessarily present in or applicable to SMUD's WMP, due to SMUD's inherent risk, size, location, and operational characteristics.

3. SMUD WMP Elements

Guidehouse reviewed the WMP elements and determined whether the activities achieve the objective of WMP “comprehensiveness” of PUC Section 8387. This determination incorporates individual elements as well as underlying data sources that further describe data collection methodologies and implementation procedures to ensure measures are carried out and also tracked.

Guidehouse determined SMUD’s WMP meets the requirement of comprehensiveness in PUC Section 8387. In this section, we review the WMP’s elements and their purpose relative to the development and successful execution of the WMP. A table comparing each subsection of PUC Section 8387 to the significant sections of the WMP can be found in Appendix A.

3.1 Responsibilities of Persons Responsible for Executing the Plan²

Section 2.5 states that SMUD’s Chief Operating Officer and Chief Customer Officer are responsible for executing the various components of the WMP. The table below is in Section 2.5.1 and lists the Director within SMUD with responsibility for the department or workgroup that are accountable for the listed components of SMUD’s WMP.

Table 3-1 – Accountability for the SMUD WMP components

Mitigation Activities	Responsible Department and Workgroup
	Director, Treasury Operations & Risk
Fire threat assessment in service area and	
Wildfire prevention strategy and programs	
- Disable automatic reclosing	
	Director, Line Assets
- Vegetation management - Pole clearing program	Director, Line Assets
Fire mitigation construction	
- Natural Ester-based fluid - Cal FIRE exempt equipment in PCA	Director, Distribution Planning & Operations
- Weather stations	Director, Transmission Planning & Operations

² PUC Section 8387(2)(A)

Enhancement projects	
Pilot projects	
Emergency preparedness	
- SMUD Emergency Operations Centers	Director, Facilities, Security & IPPS
- Public and agency communications for wildfires	Director, Customer Operations & Community Energy Services, Director, Customer Experience Delivery, Director, Corporate Communications

3.2 Objectives of the Plan³

The primary objectives of this WMP, are described in Section 2.4 of the WMP and include:

1. Minimize the probability that SMUD’s transmission and Distribution system may be the origin or contributing source for the ignition of the wildfire
2. Implement a wildfire mitigation plan that embraces safety, prevention, mitigation and recovery as a central priority for SMUD
3. Create a WMP that is consistent with state law and objectives.

3.3 Wildfire Prevention Strategies⁴

Section 3 provides an overview of SMUD’s preventative strategies and programs to minimize the risk of electrical lines and equipment causing a catastrophic wildfire. Table 4 of the WMP provides a summary of SMUD’s programs and activities that support wildfire prevention and mitigation.

The five major categories included in Table 4 of the WMP are:

- Design and construction
- Inspection and maintenance
- Operational practice
- Situational/conditional awareness
- Response and recovery

These categories are elaborated on in detail in Sections 6, 7, and 8 of the WMP. Guidehouse agrees with the WSAB that SMUD has “exemplary description of comprehensive wildfire mitigation strategies in their 2022 WMP”.

³ PUC Section 8387(2)(B)

⁴ PUC Section 8387(2)(C)

3.4 Metrics⁵

SMUD describes several metrics to assess the performance of the WMP and its effectiveness in reducing catastrophic wildfire in Section 9. These metrics are tied to more granular and specific maintenance activities that SMUD has determined are more closely tied to WMP performance. The types of metrics include Key Performance Indicators (KPIs) which measure inspection program performance, grid condition findings, drivers of ignition, project completion and community outreach programs. These are defined in Tables 8, 9, 10, 11 and 12 of the WMP.

The WMP also discusses the process used by SMUD to identify and establish metrics and benchmarks to minimize risk of wildfire ignition from SMUD assets at the transmission and distribution level. The WMP also discusses the process to determine realistic percentage reduction targets against the determined benchmarks.

Guidehouse agrees with the WSAB that SMUD's metrics are an excellent selection of comprehensive tracking metrics to assess progress on mitigation of wildfire risks.

3.5 Disabling Reclosers⁶

Sections 6.1.1 and 6.2.1 detail the procedures for operations of reclosers. According to the WMP, SMUD changes their distribution recloser operations during fire season which it defines as May 1 to October 1 or any time RFW is in effect for areas inside of or surrounding the Pole Clearing Area (PCA). During this time, SMUD disables automatic reclosing on certain substations and line reclosers extending into the PCA. In cases where automatic reclosing cannot be disabled, line reclosers will be bypassed and fuses at the end of the line will provide protection. SMUD recognizes that with climate change, the dry summer season extends further into the year, and as a result, SMUD disables reclosing until the first major rain event within the service territory following the end of the summer period. In addition, reclosing on the transmission system is disabled throughout the entire year.

3.6 De-Energizing Protocols⁷

Section 6.1.2 details the planned de-energization during fire season for SMUD's distribution system. SMUD's Distribution System Operations (DSO) personnel have the authority to de-energize select distribution circuits in the PCA. DSO relies on weather data from various sources and SMUD's internal Energy Management System to make this determination. SMUD includes a list of triggers for de-energization for PCA circuits in their WMP.

Section 6.2.2 describes planned de-energization for SMUD's transmission grid. SMUD's Power System Operators (PSO) have the authority to de-energize portions or all the Valley and UARP transmission line(s) for safety, reliability, conditions beyond design criteria, threat of wildfires and during emergency conditions when requested by local law enforcement or fire officials. The PSO will take a combination of many factors into consideration when implementing de-energization procedures, which include triggers listed in Section 6.2.2. The PSO also utilizes

⁵ PUC Section 8387(2)(D) and PUC Section 8387(2)(E)

⁶ PUC Section 8387(2)(F)

⁷ PUC Section 8387(2)(F)

operational and situational awareness tools to determine if de-energization is appropriate that are also included in Section 6.2.2.

3.7 Event Communication⁸

Section 7.2 of the WMP describes event communication. The WMP states that SMUD will communicate to key stakeholders such as impacted federal, state, and local officials, City and County executive staff, tribal representatives, and first responders through a variety of channels. SMUD has specific personnel for each specific stakeholder and critical customers potentially affected by a de-energization event.

Section 7.2.1 describes communication to customers for a de-energization event. The WMP states that SMUD will send automated pre-recorded phone call to customers in the impacted areas which directs them to SMUD's website for up-to-date information.

3.8 Vegetation Management⁹

Section 6.4 of the WMP details SMUD's Vegetation Management (VM) plan which takes place on the transmission and distribution system in the Valley and the UARP. The section describes how SMUD's program meets federal and state regulations including Public Resources Codes section 4292 and 4293 and the North American Electric Reliability Corporation's FAC-003-5 Transmission Vegetation Management reliability standard. The program also incorporates the standards in CPUC GO 95 Rule 35. In the PCA, poles with non-exempt equipment have annual vegetation clearing and/or pruning within a 10-foot radius in compliance with PRC 4292 prior to the start of fire season.

On the distribution system, SMUD conducts time-based trimming on one-, two- or three-year intervals using ground-based inspections. These are described in Section 6.4.1. SMUD uses a contractor to complete identified vegetation work and utilizes a 15-foot clearance on areas within SMUD's service area and 30+ feet of clearance in the HFTD tiers 2 and 3 at the time of tree work.

On the transmission system, SMUD conducts annual ground-based field patrols which are described in section 6.4.2. These patrols are traditional, ground-based inspections of tree and conductor clearance as well as hazard tree identification. Once identified, contractors will complete the VM planners' scope of work to achieve safety clearance. SMUD also complete two annual aerial patrols in El Dorado County to address ongoing challenge of tree mortality due to drought and insects.

3.9 Infrastructure Inspections¹⁰

Section 6.3 contains SMUD's infrastructure inspections and maintenance information. The WMP describes inspection practices for both transmission and distribution level circuits. The section states that SMUD's transmission lines are grouped into two inspection areas. These are the UARP region which is all lines east of Folsom to the hydroelectric facilities in the Sierra and the Valley region which contains all transmission lines in SMUD's service territory. Sections 6.3.1.1

⁸ PUC Section 8387(2)(G)

⁹ PUC Section 8387(2)(H)

¹⁰ PUC Section 8387(2)(I)

through 6.3.1.4 of SMUD's WMP describe various types of transmission inspections which include aerial patrols, ground patrols, infrared (IR) inspections and wood pole intrusive inspections. Aerial patrols are performed in helicopters once per year in the Valley area and twice per year in the UARP. Ground patrols are performed by either walking or driving and occasionally include IR inspections. These occur once per year in UARP and once per two years in the Valley area. IR inspections are performed as part of one of the helicopter patrols. In these inspections an IR camera is used to identify hot spots on the transmission equipment. These occur annually on the UARP and every two years in the Valley. Wood pole intrusive inspections are performed using more sophisticated diagnostic tools and include taking a sample for analysis. These occur at a minimum cycle of once per 10 years and a maximum cycle of once per 14 years.

Distribution line inspections are described in Section 6.3.2. The distribution line inspections include detailed line inspections, line patrols, 69kV and pole clearing area 12kV IR inspections, wood pole intrusive inspections. Detailed line inspections are performed by walking and driving down distribution circuits. Each pole is part of a detailed visual inspection to check for damage and condition of equipment. These occur every five years on all overhead and pad mounted equipment and once per three years on underground equipment. Line patrols occur annually on all distribution lines and equipment and check for any obvious signs of defects, vegetation clearance issues or damage to equipment. 69kV and pole clearing area 12kV IR inspections are performed via helicopter using an IR camera. These inspections are performed every other year in the Valley area. Wood pole intrusive inspections follow the same criteria as transmission poles. As stated above, these are performed once per 10 to 14 years.

3.10 Risk Assessment and Drivers¹¹

Section 4 of SMUD's WMP describes SMUD's risk assessment process and risk drivers. SMUD utilizes its existing ERM framework which considers both quantitative and qualitative factors to determine inherent and residual risk. When performing risk evaluation, SMUD's Enterprise Risk Oversight Committee oversees the process which is made up of a five-step process:

1. Identify
2. Analyze
3. Plan and Evaluate
4. Respond
5. Monitor and review

These steps were performed to during the risk assessment process for wildfire events. During the process, SMUD consulted subject matter experts to aid in developing key risk drivers and impacts for the WMP. From this process, SMUD determined four categories for potential fire risk drivers that could cause powerline sparks and ignitions. SMUD's WMP details these four drivers in Sections 4.2.1.1 through 4.2.1.4. The WMP identifies common and specific examples of risk drivers in each of the four categories. The four categories are:

- Contact from objects
- Equipment/facility failure
- Wire-to-wire contact/contamination

¹¹ PUC Section 8387(2)(J)(i); PUC Section 8387(2)(J)(ii); PUC Section 8387(2)(L)

- Other

In addition to identifying key risk drivers, the WMP also details SMUD’s efforts to reduce risk of powerline ignition and improve the company’s response to wildfire events. In Section 4.6, the WMP discusses actions taken since the plan’s inception aimed at reducing risk of powerline ignitions. Examples in the WMP include undergrounding of 4kV lines, installing remote de-energization of 4kV lines, and a pilot program for taking drone photos of all transmission structures in the UARP. On top of these risk reduction efforts, SMUD performs regular tabletop exercises to test, analyze and enhance the current level of SMUD’s internal and external coordination and expertise in responding to potential wildfire threats. The tabletop exercises’ operational objectives are developed to evaluate SMUD’s core response capabilities in three specific areas: (1) wildfire preparedness/mitigation, (2) emergency notification and response, and (3) short-term recovery operations and procedures. These exercises include external stakeholders such as local fire, law enforcement and emergency services serving communities.

3.11 Asset Overview and Service Territory¹²

Section 5 contains SMUD’s asset threat overview. This section contains a description of asset categories and an inventory of SMUD’s transmission and distribution assets in CPUC HFTD tiers and assets outside of tiered areas. There is a total of 89 circuit miles of overhead transmission in Tier 2 and 55 circuit miles of overhead transmission in Tier 3. This makes up 19% and 12% of the total overhead transmission circuit miles respectively. SMUD included the table below which shows the breakdown of assets by tier area and voltage.

Table 3-2 – Breakdown of SMUD's 2022 electrical assets within Tier 2 and Tier 3 HFTD

Asset	Total	Outside HFTD		Tier 2		Tier 3	
	Circuit miles	Circuit miles	%	Circuit miles	%	Circuit miles	%
Total OH transmission	470	326	69%	89	19%	55	12%
12 & 21 kV (Generation tie lines)	<1	<1	0	0	0	<1	<1%
69 kV	38	7	18%	31	81%	0	0%
115 kV	51	51	100%	0	0%	0	0%
230 kV	381	268	70%	58	15%	55	14%
Total OH distribution	3868	3867	100%	<1	<1%	0	0
Total OH T&D circuit-miles	4338	4194	97%	89	2%	55	1%
	Total No.	Outside HFTD		Tier 2		Tier 3	
Total load serving substations	243	243	100%	0	0%	0	0%

In Section 5.3, SMUD describes the “UARP” area which includes the hydroelectric project known as UARP and multiple switchyards which are connected via 69kV and 230kV lines which

¹² PUC Section 8387(2)(K)

traverse through the Sierra Nevada Mountain Range and the CPUC's HFTD Tier 2 and Tier 3 areas. This area is especially susceptible to wildfires due to regional climate that facilitates regular drought conditions, the natural plant communities that produce excess fuel, and the natural and anthropogenic ignition sources. Operation of SMUD's facilities in the UARP have never been associated with the ignition of a wildfire. Figure 3-1 was included in the WMP and shows the UARP area where all SMUD's Tier 2 and Tier 3 assets are located.

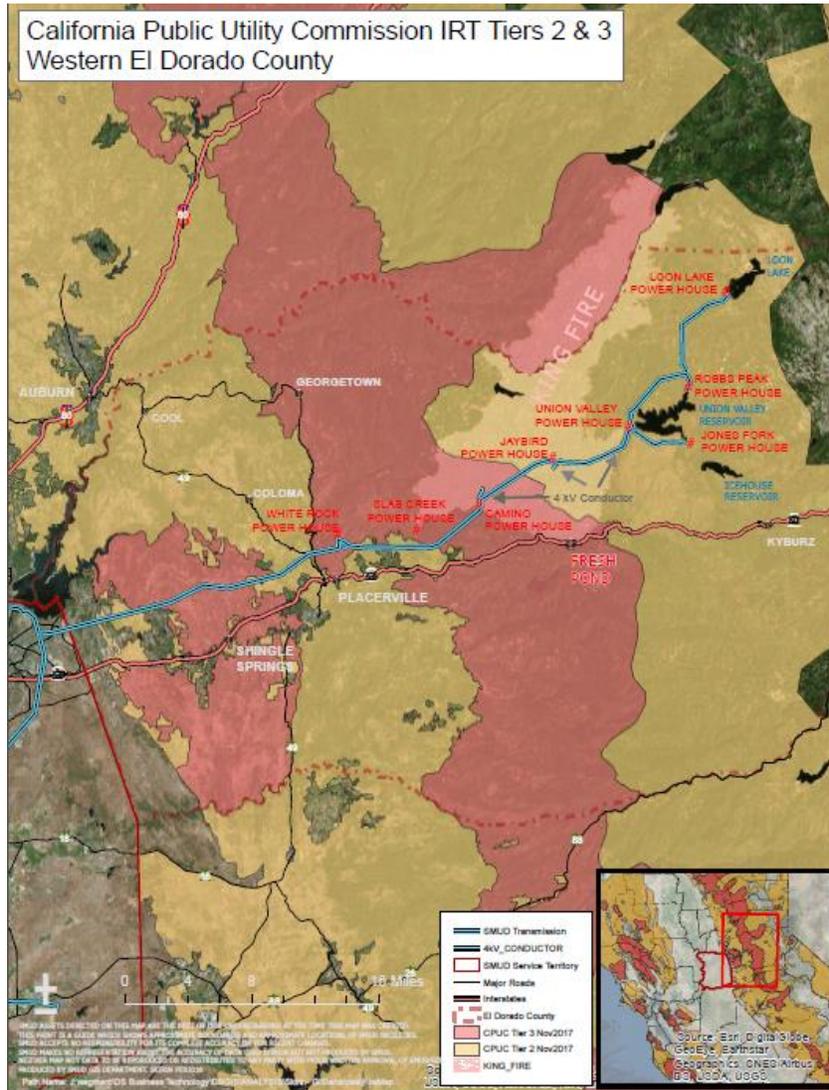


Figure 3-1 – UC Tier 2 and Tier 3 areas for SMUD’s UARP

In Section 2, the WMP contains an overview of SMUD’s service territory and the map shown below.

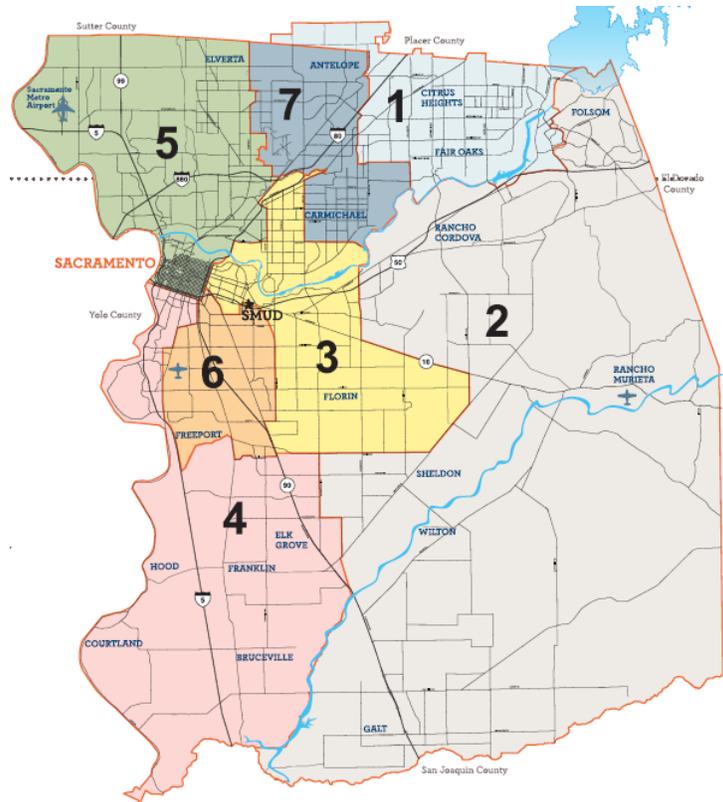


Figure 3-2 – Map of SMUD’s Service Area

3.12 Restoration¹³

Section 8.1 describes restoration of service for SMUD if lines are de-energized in anticipation of a wildfire threat. In order to restore service, SMUD troubleshooters and patrollers must follow the following steps: 1) Patrol, 2) Repair, 3) Test and 4) Restore. During the patrol step, SMUD crews check the line for any obvious damage or vegetation in lines that may prevent safe energization. For the repair step, crews are dispatched to repair or replace any damage found on equipment on a circuit. Vegetation management crews may be called in to clear an area as well. In the test step, crews test the circuit by closing the fuse or breaker to re-energize the line segment. In the restore step, power is restored, and the outage management system provides notification of power restoration to customers.

Section 8.2 includes information on restoration of service after a wildfire event that causes damage to the system. If infrastructure is damaged during a wildfire event and reconstruction of a line or circuit is required, a more comprehensive restoration process is needed. This process consists of the following steps: 1) Assessment, 2) Planning, 3) Mobilize, 4) Rebuild and 5) Restore. Throughout the process, local agencies in charge of the fire are worked with to access areas impacted in a safe manner. During the assessment, crews patrol each line segment to determine the extent of damage that has occurred and the actions and personal protective equipment requirements for crew. VM crews assess vegetation damage. In the planning step, SMUD personnel including supervisors, managers and engineers meet and plan the restoration. During the mobilize stage, SMUD coordinates labor and material to perform the reconstruction

¹³ PUC Section 8387(2)(M)

work. The next step is rebuild. In this step, lines are rebuilt with a mix of temporary and permanent structures. This step is highly dependent on the extent of the damage. Finally, the restore step takes place. SMUD will restore services to customers as soon as possible in this step.

3.13 Monitoring and Auditing the Plan¹⁴

Section 9.2 describes the monitoring and auditing of the WMP. This audit will align with SMUD's existing business planning process. SMUD's business planning process includes budgeting and strategic planning for a three-to-five-year planning horizon.

3.14 Annual Review¹⁵

Section 9.2 states that SMUD's WMP is reviewed annually. This review includes an assessment of the WMP programs and performance.

¹⁴ PUC Section 8387(2)(N)(i) and PUC Section 8387(2)(N)(ii)

¹⁵ PUC Section 8387(2)(N)(iii)

4. Results and Discussion

Guidehouse finalized this assessment on May 30, 2023. Over the course of reviewing SMUD's WMP, discussions with SMUD staff, and review of supporting documentation, Guidehouse captured takeaways and findings that align the WMP with state laws and effective wildfire measure demonstration for a utility of SMUD's size and risk profile. SMUD's WMP appropriately responds to each of the required elements of PUC Section 8387, which is detailed in Appendix A. The following describes the assessment and resulting findings of the WMP's proposed and established mitigation measures as it applies to safe, reliable operation of all electric infrastructure and wildfire prevention and response.

Report Conclusions

After internal review of the latest version of the WMP and associated data collection products, Guidehouse concludes this Report with the following:

- SMUD's WMP aligns appropriately with PUC Section 8387 and includes all required elements.¹⁶
- SMUD's WMP is comprehensive as described through this Report in accordance with PUC Section 8387.

¹⁶ Following acceptance of this Report, SMUD will post the Report and results online for public view. The Report is scheduled for presentation to the City Council at a public meeting in June 2023. Accomplishing these follow-up tasks will meet all required statutory provisions up until presenting the final WMP to the SMUD Board.

Appendix A. Statutory Compliance Matrix

Required Statutory Element	Plan Section Reference(s)	SMUD Plan Elements (Summarized)	Meets Section Elements (Determination)
<p>(a) Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.</p>			
<p>(b) (1) The local publicly owned electric utility or electrical cooperative shall, before January 1, 2020, prepare a wildfire mitigation plan. After January 1, 2020, a local publicly owned electric utility or electrical cooperative shall prepare a wildfire mitigation plan annually and shall submit the plan to the California Wildfire Safety Advisory Board on or before July 1 of that calendar year. Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan.</p>			
<p>(2) The wildfire mitigation plan shall consider as necessary, at minimum, all of the following:</p>			
<p>(A) An accounting of the responsibilities of persons responsible for executing the plan.</p>	<p>Section 2.5</p>	<p>SMUD has Accountability of the plan section in its plan with descriptions of the roles of SMUD's Chief Operating Officer, Chief Customer Officer, and others responsible for executing the various components of the WMP</p>	<p>Yes</p>

<p>(B) The objectives of the wildfire mitigation plan.</p>	<p>Section 2.4</p>	<p>SMUD has clearly stated objectives in its plan. (1) Minimize the probability that SMUD's transmission and Distribution system may be the origin or contributing source for the ignition of the wildfire. (2) Implement a wildfire mitigation plan that embraces safety, prevention, mitigation, and recovery as a central priority for SMUD. (3) Create a WMP that is consistent with state law and objectives.</p>	<p>Yes</p>
<p>(C) A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.</p>	<p>Sections 3, 6, 7 and 8</p>	<p>Section 3 provides an overview and Sections 6, 7, and 8 provide a detailed description of SMUD's preventative strategies with specific subsections on design and construction, inspection and maintenance (including vegetation management) operational practices, and situational/conditional awareness.</p>	<p>Yes</p>
<p>(D) A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.</p>	<p>Section 9</p>	<p>SMUD describes several metrics to assess the performance of the WMP and its effectiveness in reducing catastrophic wildfire in Section 9. These metrics tied to more granular and specific maintenance activities that SMUD has determined are more closely tied to WMP performance.</p>	<p>Yes</p>
<p>(E) A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.</p>	<p>Section 9</p>	<p>SMUD tracks KPIs which measure inspection program performance, grid condition findings, drivers of ignition, project completion and community outreach programs. These are used to inform the plan and determine realistic percentage reduction targets against the determined benchmarks.</p>	<p>Yes</p>
<p>(F) Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.</p>	<p>Sections 6.1.1, 6.1.2, 6.2.1, and 6.2.2</p>	<p>Section 6.1.1 and 6.2.1 discuss disabling reclosers. According to the WMP, SMUD changes their operation during fire season which is defined as May 1 to October 1 or any time RFW is in effect for areas inside of or surrounding the PCA. SMUD also disables reclosing for all transmission lines in the valley and UARP.</p> <p>Section 6.1.2 and 6.2.2 of the WMP discusses de-energizing protocols for SMUD. Distribution System Operations (DSO) personnel have the authority to de-energize select distribution circuits and utilize weather data and SMUD's EMS to make the determination to de-energize. Similarly, the Power System Operators (PSOs) have authority to de-energize transmission lines due to fire danger conditions which exceed design criteria.</p>	<p>Yes</p>

<p>(G) Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.</p>	<p>Section 7.2</p>	<p>Section 7.2 of the WMP describes event communication. The WMP states that SMUD will communicate to key stakeholders such as impacted federal, state and local officials, City and County executive staff, tribe representatives and first responders through a variety of channels with stakeholder specific assigned personnel.</p>	<p>Yes</p>
<p>(H) Plans for vegetation management.</p>	<p>Section 6.4</p>	<p>SMUD details the vegetation management program in Section 6.4. It describes procedures for both transmission and distribution circuits as well as circuits located in HFTD Tiers 2 and 3.</p>	<p>Yes</p>
<p>(I) Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.</p>	<p>Section 6.3</p>	<p>SMUD describes its inspection process in the WMP for two areas – the UARP area and Valley area. SMUD uses a combination of ground and aerial inspections to patrol lines.</p>	<p>Yes</p>
<p>(J) A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following:</p>	<p>Section 4</p>	<p>SMUD's WMP includes a thorough assessment of risk and risk drivers as well as the process which risk is assessed for those drivers.</p>	<p>Yes</p>
<p>(i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility's or electrical cooperative's equipment and facilities.</p>	<p>Section 4.2.1</p>	<p>SMUD identifies four categories of risk drivers and details their potential impacts within the WMP.</p>	<p>Yes</p>
<p>(ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.</p>	<p>Section 4 & 5</p>	<p>SMUD discusses particular risks associated with topographical and climatological risk factors throughout Section 4.2 and describes topographical risks associated with the UARP and Sierra Nevada mountains in Section 5.</p>	<p>Yes</p>

<p>(K) Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire-threat district based on new information or changes to the environment.</p>	<p>Section 5, 5.1, and 5.2</p>	<p>Sections 5, 5.1, and 5.2 of the WMP contains SMUD's asset threat overview. These sections contain a description of asset categories and an inventory of SMUD's transmission and distribution assets in CPUC HFTD tiers and assets outside of tiered areas.</p>	<p>Yes</p>
<p>(L) A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.</p>	<p>Section 4.2</p>	<p>SMUD includes a five-part process to evaluate its risk. (1) Identify, (2) Analyze, (3) Plan & Evaluate, (4) Respond and (5) Monitor & Review. The WMP also includes a bowtie risk assessment for key risk drivers and key risk impacts for wildfire related risk.</p>	<p>Yes</p>
<p>(M) A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.</p>	<p>Section 8.1 and 8.2</p>	<p>SMUD WMP provides a statement of how it plans to restore service after a wildfire, including a discussion of efforts to inspect the condition of the system prior to energization and restoration after a wildfire event that causes major damage to the system.</p>	<p>Yes</p>
<p>(N) A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following:</p>			
<p>(i) Monitor and audit the implementation of the wildfire mitigation plan.</p>	<p>Section 9.2</p>	<p>SMUD will audit the plan annually in alignment with SMUD's existing business planning process.</p>	<p>Yes</p>
<p>(ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.</p>	<p>Section 9.2</p>	<p>SMUD has stated that deficiencies identified should be corrected as they are found by the COO.</p>	<p>Yes</p>
<p>(iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.</p>	<p>Section 9.2.3</p>	<p>SMUD monitors and audits effectiveness of electrical line and equipment inspections. This process is described for distribution line inspections and vegetation management audits in Section 9.2.3.</p>	<p>Yes</p>

<p>(3) The local publicly owned electric utility or electrical cooperative shall, on or before January 1, 2020, and not less than annually thereafter, present its wildfire mitigation plan in an appropriately noticed public meeting. The local publicly owned electric utility or electrical cooperative shall accept comments on its wildfire mitigation plan from the public, other local and state agencies, and interested parties, and shall verify that the wildfire mitigation plan complies with all applicable rules, regulations, and standards, as appropriate.</p>	<p>Section 2.6</p>	<p>SMUD will present its WMP to the City Council at a public annually, following public posting and opportunities for public comment.</p>	<p>Yes</p>
<p>(c) The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The independent evaluator shall issue a report that shall be made available on the internet website of the local publicly owned electric utility or electrical cooperative, and shall present the report at a public meeting of the local publicly owned electric utility's or electrical cooperative's governing board.</p>	<p>Section 2.6.3</p>	<p>SMUD contracted with Guidehouse Consulting, Inc. to perform an independent evaluation of its WMP. Qualifications are described in Section 1.</p>	<p>Yes</p>

RESOLUTION NO. _____

WHEREAS, Senate Bill 901 (2018) and Assembly Bill 1054 (2019) revised the California Public Utilities Code section 8387 (PUC § 8387) to require that before January 1, 2020, and annually thereafter, every publicly owned electric utility (POU) prepare a **Wildfire Mitigation Plan (WMP)**, present it in a noticed public meeting, and accept comments; and

WHEREAS, PUC § 8387 also requires that each POU update its plan annually and submit the update to the **California Wildfire Safety Advisory Board (WSAB)** by July 1 of each year; and

WHEREAS, PUC § 8387 also requires that at least once every three years, the plan submitted to the **WSAB** shall be a comprehensive revision of the plan; and

WHEREAS, PUC § 8387 states that the POU shall contract with a qualified independent evaluator experienced in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of the POU's **WMP**, who shall issue a report and present the report at a public meeting; and

WHEREAS, by Resolution No. 19-10-09, adopted on October 17, 2019, this Board adopted SMUD's **WMP** and authorized the Chief Executive Officer and General Manager to make future changes to the SMUD **WMP** that further the primary purpose of the SMUD **WMP** and provide a net benefit to SMUD; and

WHEREAS, by Resolution No. 20-11-04, adopted on November 19, 2020, Resolution No. 21-06-02, adopted on June 17, 2021, and Resolution No. 22-05-05, adopted on May 19, 2022, this Board adopted annual updates to SMUD's **WMP** and

authorized the Chief Executive Officer and General Manager to make future changes to the SMUD **WMP** that further the primary purpose of the SMUD **WMP** and provide a net benefit to SMUD; and

WHEREAS, in accordance with PUC § 8387, staff completed its triennial update of SMUD's **WMP**, conducted public outreach to solicit comments on the draft 2023-2025 **WMP** update, and contracted with **Guidehouse**, as the Qualified Independent Evaluator, to assess the comprehensiveness of the 2023-2025 **WMP** update; and

WHEREAS, the draft 2023-2025 **WMP** was posted on smud.org/wildfiresafety and made available for public review and comment for over thirty days ending May 5, 2023; and

WHEREAS, SMUD received no public comment on the draft 2023-2025 **WMP** update; and

WHEREAS, **Guidehouse** completed its independent evaluation and issued its report dated May 30, 2023, concluding that the SMUD 2023-2025 **WMP** is comprehensive and meets all plan requirements set forth in PUC 8387(b); and

WHEREAS, the SMUD 2023-2025 **WMP** and independent evaluator's report prepared by **Guidehouse** were presented to the SMUD Board of Directors Energy Resources & Customer Services Committee at a duly noticed public meeting on June 14, 2023, at which meeting opportunity for public comment was provided; **NOW, THEREFORE**,

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

Section 1. This Board adopts the SMUD 2023-2025 **Wildfire Mitigation Plan (WMP)** substantially in the form set forth in **Attachment ____** hereto and made a part hereof.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the SMUD **WMP** that, in his prudent judgment: (a) further the primary purpose of the SMUD **WMP**; and (b) are intended to provide a net benefit to SMUD.

SSS No.
RS23-003

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date Finance & Audit – 06/14/23
Board Meeting Date June 15, 2023

TO				TO								
1.	Scott Martin	6.										
2.	Jennifer Davidson	7.										
3.	Jose Bodipo-Memba	8.										
4.	Lora Anguay	9.	Legal									
5.		10.	CEO & General Manager									
Consent Calendar		x	Yes	No <i>If no, schedule a dry run presentation.</i>		Budgeted		x	Yes	No <i>(If no, explain in Cost/Budgeted section.)</i>		
FROM (IPR) Alcides Hernandez				DEPARTMENT Revenue Strategy				MAIL STOP B256	EXT. 6397	DATE SENT 5/19/23		

NARRATIVE:

Requested Action: Approve August 30, 2023, as the Public Hearing date for considering the Chief Executive Officer and General Manager’s Report and Recommendations on Rates and Services – Volumes 1 and 2 (“CEO & GM Report”) dated June 15, 2023.

Summary: Initiate the public rate process by setting August 30, 2023, as the public hearing date for considering proposals presented in the CEO & GM Report for modifications to SMUD’s Rates, Rules and Regulations. The Chief Executive Officer and General Manager is expected to publicly release the CEO & GM Report with the Board’s setting of the public hearing date. The following dates for the public workshops associated with the rate process will also be published:

- Rates Workshop #1: July 13, 2023
- Rates Workshop #2: August 3, 2023.

Board Policy: *(Number & Title)* While meeting provisions of the Board’s competitive rates directive (SD-2 Competitive Rates), this proposal maintains competitive rates and low-cost access to credit markets (SD-3 Access to Credit Markets).

Benefits: Initiates the rate process for public communication regarding proposed modifications to SMUD’s Rates, Rules and Regulations.

Cost/Budgeted: N/A

Alternatives: N/A

Affected Parties: SMUD and SMUD customers

Coordination: Revenue Strategy

Presenter: Alcides Hernandez, Manager, Revenue Strategy

Additional Links:

SUBJECT SMUD 2023 Rate Process	ITEM NO. <i>(FOR LEGAL USE ONLY)</i> 9
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, the Chief Executive Officer and General Manager filed with this Board the **Chief Executive Officer and General Manager’s Report and Recommendation on Rates and Services – Volumes 1 and 2 (CEO & GM Report)** dated June 15, 2023; and

WHEREAS, section 14403 of the Public Utilities Code requires that within ninety (90) days after the **CEO & GM Report** is filed, this Board shall hold a public hearing on said **CEO & GM Report**; **NOW, THEREFORE**,

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

A public hearing date of August 30, 2023, is hereby scheduled to consider the **Chief Executive Officer and General Manager’s Report and Recommendation on Rates and Services – Volumes 1 and 2 (CEO & GM Report)** dated June 15, 2023.

SSS No. SCS 23-121

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date Finance & Audit – 06/14/23
Board Meeting Date June 15, 2023

TO				TO								
1.	Robert Adams	6.	Lora Anguay									
2.	Casey Fallon	7.	Scott Martin									
3.	Eric Poff	8.	Jose Bodipo-Memba									
4.	Frankie McDermott	9.	Legal									
5.	Jennifer Davidson	10.	CEO & General Manager									
Consent Calendar		<input checked="" type="checkbox"/> Yes		No <i>If no, schedule a dry run presentation.</i>		Budgeted		<input checked="" type="checkbox"/> Yes		No <i>(If no, explain in Cost/Budgeted section.)</i>		
FROM (IPR) Jesse Mays				DEPARTMENT Procurement				MAIL STOP EA404	EXT. 5744	DATE SENT 5/30/2023		

NARRATIVE:

Requested Action: Approve an increase to the aggregate contract not-to-exceed amount for distribution substation transformers by \$6 million, from \$32.4 million to \$38.4 million, for Contract No. 4600001232 with Pennsylvania Transformer Technology, Inc. and Contract No. 4600001382 with Siemens Energy, Inc.

Summary: By Board Resolution No. 19-01-03, Contract No. 4600001232 with Pennsylvania Transformer Technology, Inc. (Pennsylvania Contract) and Contract No. 4600001231 with Siemens Industry, Inc. c/o Geo E Honn Company, Inc. (Siemens Contract) were awarded in January 2019 for provision of distribution substation transformers to support new substation builds, replacements, and spares for a four-year term from approximately January 23, 2019, to January 16, 2023, with an optional one-year extension, for a total not-to-exceed aggregate contract amount of \$32.4 million. Contract Change No. 01 to the Siemens Contract modified the General Conditions to add Section 5.23 clarifying ownership of programs, designs, and drawings. Contract Change No. 02 to Siemens Contract was a novation from Siemens Industry, Inc. to Siemens Energy, Inc. wherein Siemens Contract No. 4600001231 was closed and replaced with Contract No. 4600001382 with Siemens Energy, Inc. (Updated Siemens Contract). Contract Change No. 01 to the Updated Siemens Contract exercised the optional one-year extension to change the expiration date from January 16, 2023, to January 16, 2024. Contract Change No. 01 to the Pennsylvania Contract exercised the optional one-year extension to change the expiration date from January 16, 2023, to January 16, 2024. The current action requests Board approval to increase the total contract aggregate not-to-exceed amount for distribution substation transformers by \$6 million to allow SMUD to order distribution substation transformers for projects in 2024. SMUD is soliciting new contracts and anticipates them to be in place by the end of 2023. Due to the current lead times for distribution substation transformers, SMUD needs to order the transformers now to ensure they are delivered on time for construction.

Currently, the contract balance is approximately \$910,000.

Contract Actions	Amount	Cumulative Total	Description
Original Contract	\$32,400,000	\$32,400,000	
Change No. 01 (Siemens Contract)	\$ 0	\$32,400,000	Revised General Conditions
Change No. 02 (Siemens Contract)	\$ 0	\$32,400,000	Revised vendor from Siemens Industry to Siemens Energy
Change No. 01 (Updated Siemens Contract) Change No. 01 (Pennsylvania Contract)	\$ 0	\$32,400,000	One-year contract extension
Pending Board Approval	\$ 6,000,000	\$38,400,000	Increase Total Aggregate Amount

Board Policy: Board-Staff Linkage BL-8, Delegation to the Chief Executive Officer and General Manager with Respect to Procurement; Procurement; Strategic Direction SD-4, Reliability
(Number & Title)

Benefits: The increased funding will allow SMUD to order distribution substation transformers to meet the construction schedule.

Cost/Budgeted: \$38.4 M; Budgeted through January 2024 by Energy Delivery & Operations.

Alternatives: Wait to order the distribution substation transformers until the new contracts are put into place in ~December 2023 and delay the substation construction projects by ~8-9 months.

Affected Parties: Energy Delivery & Operations, Supply Chain Services, and Contractor.

Coordination: Energy Delivery & Operations and Supply Chain Services.

Presenter: Casey Fallon, Director of Procurement, Warehouse & Fleet

Additional Links:

SUBJECT

NTE Aggregate Amount Increase for Distribution Substation Transformers

ITEM NO. (FOR LEGAL USE ONLY)

10

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, by Resolution No. 19-01-03, adopted on January 17, 2019, this Board authorized the Chief Executive Officer and General Manager to award Contract No. 4600001232 to **Pennsylvania Transformer Technology, Inc. (Pennsylvania Contract)** and Contract No. 4600001231 to **Siemens Industry, Inc. c/o Geo E Honn Company Inc. (Siemens Contract)** for provision of distribution substation transformers for a four-year term from approximately January 23, 2019, to January 16, 2023, for a total aggregate contract not-to-exceed amount of \$32,400,000; and

WHEREAS, Contract Change 1 to the **Siemens Contract** modified the General Conditions by adding Section 5.23 to clarify ownership of programs, designs, and drawings; and

WHEREAS, Contract Change 2 to the **Siemens Contract** was a novation from **Siemens Industry, Inc.** to **Siemens Energy, Inc.** wherein the **Siemens Contract** was closed and replaced by Contract No. 4600001382 with **Siemens Energy, Inc. (Updated Siemens Contract)**; and

WHEREAS, Contract Change 1 to the **Updated Siemens Contract** exercised the optional one-year extension to change the expiration date from January 16, 2023, to January 16, 2024; and

WHEREAS, Contract Change 1 to the **Pennsylvania Contract** exercised the optional one-year extension to change the expiration date from January 16, 2023, to January 16, 2024; and

WHEREAS, staff has initiated a solicitation process for successor contracts and anticipates new contracts to be in place by the end of 2023, but due to the

current lead times for distribution substation transformers, orders must be placed now to ensure on-time delivery for anticipated construction; and

WHEREAS, increasing the aggregate contract not-to-exceed amount for distribution substation transformers will ensure continuity of necessary work as the new contracts are put in place; **NOW, THEREFORE**,

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

Section 1. That this Board hereby authorizes the Chief Executive Officer and General Manager, or his designee, to increase the aggregate contract not-to-exceed amount for distribution substation transformers by \$6 million, from \$32.4 million to \$38.4 million for Contract No. 4600001232 with **Pennsylvania Transformer Technology, Inc.** and Contract No. 4600001382 with **Siemens Energy, Inc.**

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the contracts that, in his prudent judgment: (a) further the primary purpose of the contracts; (b) are intended to provide a net benefit to SMUD; and (c) do not exceed the authorized contract amounts and applicable contingencies.

SSS No. PSS 23-005

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
 Finance & Audit – 06/14/23
 Board Meeting Date
 June 15, 2023

TO		TO	
1.	Jose Bodipo-Memba	6.	
2.	Jennifer Davidson	7.	
3.	Lora Anguay	8.	
4.	Scott Martin	9.	Legal
5.		10.	CEO & General Manager

Consent Calendar		Yes	<input checked="" type="checkbox"/>	No <i>If no, schedule a dry run presentation.</i>	Budgeted	<input checked="" type="checkbox"/>	Yes	No <i>(If no, explain in Cost/Budgeted section.)</i>
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FROM (IPR) Laurie Rodriguez	DEPARTMENT People Services & Strategies	MAIL STOP B251	EXT. 5628	DATE SENT 05/24/23
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NARRATIVE:

Requested Action: Approve increase to reimbursable technology expenses for local agency executives.

Summary: Employees who are permitted to use personal devices to conduct SMUD business can receive technology allowances and reimbursement of expenses incurred related to the use of their personal devices, instead of SMUD-issued equipment.

SMUD’s current policy allows reimbursement of technology-related expenditures with proof of purchase for eligible employees including local agency executives for, among other things, purchase of a cell phone device (\$300 every 36 months or \$200 every 24 months). Also currently, Senior Leadership, including local agency executives, can receive \$1,000 reimbursement for purchase every 24 months of a laptop or iPad.

People Services & Strategies (PS&S) is recommending updating the current Technology Allowance Policy to allow eligible employees including local agency executives to receive \$400 cell phone reimbursement every 24 months and to remove \$300 reimbursement every 36 months for purchase of a cell phone.

Additionally, cell phones would be added to eligible devices that Senior Leadership, including local agency executives, can receive \$1,000 reimbursement for purchases every 24 months. Eligible employees receiving \$1,000 reimbursement for cell phone are not eligible for the \$400 reimbursement referenced above.

Board Policy: Strategic Direction SD-8, Employee Relations: a) SMUD shall attract and retain a highly qualified and diverse workforce.; Governance Process GP-3, Board Job Description: j) Take such other actions as may be required by law.

Benefits: Allows SMUD to remain competitive in attracting and retaining a highly qualified workforce.

Cost/Budgeted: \$10,000 estimated budget increase.

Alternatives: Do not increase the allowed reimbursable amount for technology. Approve a different modification to the allowed reimbursable amount for technology.

Affected Parties: Board of Directors and SMUD Employees eligible for technology reimbursement.

Coordination: Executive Office, Board Office, Accounting, People Services & Strategies & Legal

Presenter: Laurie Rodriguez, Director, People Services & Strategies

Additional Links:

SUBJECT Increase to Technology Allowance	ITEM NO. (FOR LEGAL USE ONLY) 11
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, employees who are permitted to use personal devices to conduct SMUD business can receive technology allowances and reimbursements of expenses incurred related to the use of their personal devices instead of SMUD-issued equipment; and

WHEREAS, SMUD's current policy allows reimbursement of technology-related expenditures with proof-of-purchase for eligible employees including local agency executives for, among other things, purchase of a cell phone device in the amount of \$300 every 36 months or \$200 every 24 months; and

WHEREAS, staff recommends an update to these limits for eligible employees including local agency executives to allow for \$400 reimbursement every 24 months for the purchase of a cell phone; and

WHEREAS, staff further recommends the addition of cell phones to eligible devices for which eligible employees including local agency executives may seek reimbursement up to \$1,000 every 24 months; and

WHEREAS, eligible employees including local agency executives may only seek reimbursement up to \$1,000 every 24 months for reimbursement of a cell phone purchase; **NOW, THEREFORE**,

**BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:**

Section 1. This Board approves an increase to reimbursable technology expenses for eligible employees including local agency executives to \$400 every 24 months for cell phone reimbursement.

Section 2. This Board further approves the addition of cell phones to eligible devices for which local agency executives may alternatively seek reimbursement in the amount of \$1,000 every 24 months instead of \$400 every 24 months.