

# Board Policy Committee Meeting and Special SMUD Board of Directors Meeting

Date: Wednesday, October 9, 2024

Time: Scheduled to begin at 6:00 p.m.

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

Powering forward. Together.



# **AGENDA**

## **BOARD POLICY COMMITTEE MEETING AND SPECIAL SMUD BOARD OF DIRECTORS MEETING**

**Wednesday, October 9, 2024**  
**SMUD Headquarters Building, Auditorium**  
**6201 S Street, Sacramento, California**  
**Scheduled to begin at 6:00 p.m.**

**Remote Telephonic Location:**  
**Kansas City Marriott Downtown**  
**200 West 12th Street**  
**Kansas City, MO 64105**

This Committee meeting is noticed as a joint meeting with the Board of Directors for the purpose of compliance with the Brown Act. In order to preserve the function of the Committee as advisory to the Board, members of the Board may attend and participate in the discussions, but no Board action will be taken. The Policy Committee will review, discuss and provide the Committee's recommendation on the following:

**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](http://smud.granicus.com/ViewPublisher.php?view_id=16)

**Zoom Webinar Link:** [Join Board Policy Committee Meeting Here](#)

**Webinar/Meeting ID:** 161 867 0796

**Passcode:** 567293

**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:

- 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](mailto:PublicComment@smud.org) or by mailing or bringing physical copies to the meeting. Email is not monitored during 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.

## **DISCUSSION ITEMS**

1.     Ellias van Ekelenburg     Discuss the monitoring report for **Strategic Direction SD-6, Safety Leadership**.  
Presentation: 15 minutes  
Discussion: 8 minutes
  
2.     James Frasher             Discuss the monitoring report for **Strategic Direction SD-10, Innovation**.  
Presentation: 12 minutes  
Discussion: 8 minutes
  
3.     James Frasher             Discuss the monitoring report for **Strategic Direction SD-19, Diversified Business**.  
Presentation: 8 minutes  
Discussion: 12 minutes
  
4.     Jennifer Restivo           Discuss, with possible amendment, proposed revisions to **Governance Process GP-15, Board Travel and Training Reimbursement**.  
Presentation: 4 minutes  
Discussion: 5 minutes
  
5.     Dave Tamayo                Board Monitoring: **Governance Process GP-8, Board Committee Principles; Governance Process GP-10, Board Training, Orientation; Governance Process GP-12, Board Compensation and Benefits; and Governance Process GP-15, Board Travel and Training Reimbursement**.  
Presentation: 5 minutes  
Discussion: 5 minutes

## **INFORMATIONAL ITEMS**

6.     Gregg Fishman             Board Work Plan.  
Presentation: 5 minutes  
Discussion: 5 minutes
  
7.     Public Comment
  
8.     Dave Tamayo                Summary of Committee Direction.  
Discussion: 1 minute

*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](http://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](mailto:Toni.Stelling@smud.org), or contact by phone at 1-916-732-7143, no later than 48 hours before this meeting.*



SSS No. E,S RES 24-09

# BOARD AGENDA ITEM STAFFING SUMMARY SHEET

Committee Meeting & Date Policy, October 9, 2024
Board Meeting Date October 17, 2024

TO		TO	
1.	Frankie McDermott	6.	
2.	Farres Everly	7.	
3.	Brandy Bolden	8.	
4.	Suresh Kotha	9.	<b>Legal</b>
5.	Claire Rogers	10.	<b>CEO &amp; General Manager</b>

<b>Consent Calendar</b>	<input checked="" type="checkbox"/>	<b>Yes</b>	<b>No</b> <i>If no, schedule a dry run presentation.</i>	<b>Budgeted</b>	<input checked="" type="checkbox"/>	<b>Yes</b>	<b>No</b> <i>(If no, explain in Cost/Budgeted section.)</i>
FROM (IPR)	DEPARTMENT			MAIL STOP	EXT.	DATE SENT	
Ellias van Ekelenburg	Env, Safety, and Real Estate Services			B209	7475	09/10/2024	

**NARRATIVE:**

**Requested Action:** Accept the monitoring report for Strategic Direction SD-6, Safety Leadership.

**Summary:** Report on the status of Strategic Direction SD-6, Safety, for safety performance from January through June of 2024. Report addresses safety leadership accomplishments during the first 6 months of the year, current Days Away Restricted Time numbers, and safety opportunities and challenges.

**Board Policy:** *(Number & Title)* This report supports the SD-6 Core Value of Safety by providing a safety performance status.

**Benefits:** Provide the scheduled bi-annual monitoring report as requested by the Board of Directors and Executive Staff. The report provides an opportunity to make recommendations or policy revisions, as necessary.

**Cost/Budgeted:** None

**Alternatives:** Provide the Board monitoring report without a presentation.

**Affected Parties:** Board of Directors, Executive Staff

**Coordination:** Organization-wide

**Presenter:** Ellias van Ekelenburg, Director of Environmental, Safety, and Real Estate Services

**Additional Links:**

SUBJECT SD-6, Safety Leadership Board Monitoring Report	ITEM NO. <i>(FOR LEGAL USE ONLY)</i>
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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:** September 25, 2024

**FROM:** Claire Rogers *CR 9/25/24*

**SUBJECT: Audit Report No. 28007752  
Board Monitoring Report; SD-6: Safety Leadership**

Internal Audit Services (IAS) received the SD-6 *Safety Leadership* first-half 2024 Biannual 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 IAS' 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 1<sup>st</sup> and 2<sup>nd</sup> Quarters, 2024 Strategic Direction SD-6, Safety Leadership**



## **1. Background**

Strategic Direction SD-6, Safety Leadership states that:

Creating a safe environment for employees and the public is a core value of SMUD.

Through best practice methods and continuous improvement, SMUD will be recognized as a leader in employee safety while also assuring the safety of the public related to SMUD operations and facilities. SMUD commits to a proactive approach, including the active involvement of SMUD leadership, employees, contractors, and the community, as well as comprehensive monitoring of organizational and public safety performance.

Therefore, SMUD will continue to improve safety results to:

### **a) Workplace Safety**

- i. Reduce SMUD's injury severity incidents to 13 or less than by 2025, as measured by OSHA's Days Away Restricted Time (DART), a rate that demonstrates top quartile safety performance for similar size utilities using the Bureau of Labor Statistics (BLS) work-related safety data.
- ii. Provide timely, quality health care for injured employees that aids their recovery while maintaining positive financial performance of the workers' compensation program.

### **b) Contractor Safety**

- i. Support contractors to reduce and eliminate potential hazards for Serious Injuries and/or Fatality (SIF) when conducting high risk work.

### **c) Public Safety**

- i. Track and report injuries to the public related to SMUD operations or facilities.
- ii. Implement measures to protect the public from injuries related to SMUD operations or facilities.



## 2. Executive Summary

**SMUD is in compliance** with the SD-6 direction and is in alignment with SMUD’s new 5-year strategy of working toward a zero-incident culture.

### **Workplace Safety**

SMUD has recorded 11 OSHA Recordables injuries in the first half of 2024. This is a 48% decrease from this time last year (21 OSHA Recordables). Of the 11 injuries, 5 (3 Lost Time & 2 Modified Duty injuries) resulted in a 0.45 DART rate. This represents a continued decrease in injuries which is trending downward to meet our 2025 Target. (See Appendix A).

Quality care of injured employees is measured through the Workers’ Compensation program’s performance, which is assessed annually by an independent actuary. SMUD continues to have a reduction in indemnity benefits over the past three years as presented below. However, the number of claims and injury frequency rates have increased.

<b>Fiscal Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>No. of Claims (Medical &amp; Indemnity)</b>	89	59	54	46	63*
<b>Incident rate per 100 employees</b>	2.3	2.4	2.2	1.8	2*
<b>Rates per \$100 payroll</b>	.94	.85	.67	.58	.50*

\*2024 data provided is a projection at the time the Actuary Report was prepared and may change.

### **Contractor Safety**

SMUD continues to use ISN to evaluate safety records and performance for high-risk contractors. This evaluation focuses on Contractor Fatality History, OSHA Citation History, DART and Total Recordable Incident Rates (TRIR), Insurance Experience Ratio, Safety Culture Questions, and Safety Program Review. Currently SMUD has 136 contractors in the ISN system.

This year we have increased the number of site safety evaluations for high-risk contractors to validate safety performance on the jobsites. Safety has completed **214** site safety visits through the 1<sup>st</sup> half of 2024 and are well on our way to meet the 2024 goal of 250 evaluations. These visits focus on SMUD contractors who work with Power Generation, Environmental Services, Line, Substation, Facilities and Vegetation Management on projects where high-risk work is performed. This work includes high voltage work, working at heights, vegetation management, confined spaces, excavations, etc. Additionally, we have fully integrated the use of the SMS system for inspections, incident tracking, reporting and investigations of SMUD contractors. This allows SMUD to verify safe working practices by our contractors to reduce the potential for serious injuries or property damage. Contractor reported incidents require an investigation to be completed, and typically will warrant additional site safety visits to verify corrective measures have been put into place to reduce further occurrences.

The Contractor Safety Team is working with ISN to pilot a safety training qualifications tool. This tool will allow a more efficient method of verifying Contractor Employee qualification. An example of this would be the SMUD Specific Vegetation Safety Orientation that will allow SMUD to communicate safe work practice expectation to our contractors. The Contractor Safety Team also partnered with the Vegetation Management Team for the 2024 Contractor Safety Day. This

event is aimed to set expectations to our Vegetation Contractors doing high risk work. This event is an effective way of reaching Vegetation Contractor employees.

In addition, SMUD Procurement and Safety have partnered to enhance contract language as it relates to contractor safety requirements, Request for Proposal (RFP) templates for high-risk work and incorporating contractor safety as part of the onboarding process. The Contractor Safety Team is currently working closely with Procurement on the RFP Reviews for high stake Contracts such as the PCC, Substation Builds, Vegetation Management Line Clearance, Line Pole Replacement, and Cable Replacement RFP's.

## **Public and Community Safety**

### Public Safety Statistics

SMUD tracks public and community incidents in the Safety Incident Tracking System (SITS) involving car-pole, electrical contacts, dig-in incidents, and injuries to the public that are related to SMUD's operations or facilities. The following statistics are reported for the 1<sup>st</sup> half 2024:

- There have been 143 incidents where the public struck a SMUD asset with a vehicle, with two fatalities from such events.
- Three electrical contact incidents were reported and have become personal injury claims pending further investigation.
- There have been 28 dig-in incidents reported with no injuries. In response to these dig-ins, SMUD's public safety team has sent out 15 notification letters to contractors and customer's responsible for the dig-in occurrence as a proactive effort to provide further awareness and education on best practices to avoid future occurrences. This is a new practice that was started to support this program.

### Public Safety Events

SMUD's Health & Safety and Line department personnel attended the Elk Grove Regional Safety Day event to provide educational outreach and resources to the Elk Grove and Galt community members in attendance. The resources provided were in promotion of digging safely around our underground lines and the USA 811 process. Approximately 2500 attendees were noted in 2024. This event was also a way for SMUD to support local area first responders for the Consumnes Services District (CSD).

SMUD's Health & Safety supported the Jackson Laboratory's Safety Awareness week by hosting a booth in support of public safety around SMUD equipment and infrastructure. Specifically, SMUD health and safety provided handouts, giveaways, prizes, and informational resources on how to remain safe around downed lines and the USA 811 process with an emphasis on the "Call Before You Dig" campaign.

SMUD's Public Safety team participated in a joint training and awareness effort with PG&E for Sacramento City Fire Department's (SFD) Officer's training class. SMUD provided knowledge on high-voltage equipment identification, SMUD's unique assets, and discussed future collaboration efforts with their leadership teams over the course of three days.

### New Public Safety Initiatives

The public safety team has partnered with Culver Communications to upgrade the smudsafety.com website geared toward third-party contractors, agricultural workers, and educators. The site functionality and aesthetics have been improved. Also, additional language

options have been added to the smudsafety.com website in order to represent the diverse community SMUD continues to serve.

SMUD's Marketing department and public safety team have partnered together to build out a campaign in support of public safety and workplace safety. This new campaign initiative involves building awareness on preventing obstructions near SMUD's infrastructure. The broad campaign was developed based upon the labor requests from the Joint Labor Management Safety Committee (JLMSC). The campaign message will be delivered to the general public in several formats, including social media, Connections Newsletters, and bill inserts in the remainder of 2024.

### **3. Additional Supporting Information**

The new SD-6 Safety Direction became effective February 2021. Our goal is to achieve the desired performance objectives by year-end 2025. This report summarizes the first half of the 2022 safety performance.

#### **Safety Leadership**

The Safety Team continues with its integration efforts to support Executive Leadership's 5-year plan that emphasizes zero incidents and injuries and a focus on a zero-accident safety culture. SMUD's Executive Leadership team continue to emphasize our Safety priority with all personnel, contractors and in the public. We continue to grow our Safety for Life culture by reducing the risk of serious injuries and fatalities, targeting messages to staff on topics beyond work related risks, and looking for new way to maintain engagement. These goals are outlined in SMUD's Safety Road Map, which was last updated in 2023.

#### **Safety Management System (SMS)**

During the first half of 2024, Optimization of Benchmark Gensuite, SMUD's Safety Management System (SMS) continued. AI functionalities within SMS were explored and are currently being piloted in the ergo evaluation application. Supervisor employee interactions were a targeted focus with office personnel. Forms were updated and new forms created to insure that frequently performed tasks are being observed during these interactions. A new incident type and log was created in the Incident & Measurements application to meet the new OSHA regulation on Workplace Violence. Enhancements to the Sustainability, ACE Forms, Concern Report and ATS application have been implemented to better align with SMUD's processes and Core Competencies. Electronic tailboards continue to be enhanced with human performance (HP) being utilized in the process. New projects and process improvements continue to evolve with increased utilization and visibility among the workforces.

#### **Safety Standards Development**

The Safety Team continues our ongoing process of updating SMUD's Health & Safety Standards, as a foundation and in support of the organization's World Class Safety initiatives. The Core Standards Team has been utilizing the same routing process as the Sacramento Power Academy, through SharePoint. This process has proven positive to bringing updates and new Standards to completion.

The Standards Team has also been working on the implementation of new regulatory requirements, including:

- Workplace Violence Prevention Plan (CA Labor Code 6401.7 and 6401.9), added to the Injury & Illness Prevention Program, as Appendix B; and

Information on the additional regulatory requirements and how SMUD leadership and employees should respond to these potential safety situations, to prevent incidents, will continue to be provided to all SMUD personnel in various formats, including Safety Meetings, ENN's, on-site electronic monitors, drop-in meetings, and Safety Training.

### **Supervisor-Employee Interactions**

Safety continues to strengthen the quality of the supervisor-employee interaction program by improving inspections and moving the process to the Safety Management System (SMS). Emphasis is placed on field visits for work with the highest hazard potential. Team Members continued visiting various crews throughout SMUD, to assist with employee safety concerns, processes, procedures, and equipment. For office personnel, an emphasis is placed on observing personnel pertaining to ergonomic risk, and slip/trip/fall hazards in walking areas. Eleven Q&A sessions were completed to support business units and leaders, navigate SMS ACE Forms and data mining reports to stay on top of their progress. Safety staff scheduled director level meetings where leaders received step by step tutorials, targets were established and the SMS Supervisor Employee interactions process was discussed. During the first half of 2024, a total of 3,418 Supervisor-Employee interactions were complete which resulted in 164% percentage observed.

### **Near Miss and Positive Observation/Good Catch Reporting**

Leadership continues to support and encourage near miss and positive observation/good catch reporting. The goal of this process is to identify opportunities for learning, prior to an incident occurring. During the first two quarters of 2024, 92 near miss and positive observation/good catch reports have been reported and recorded in the Safety Management System (SMS). Seventy-two have been recorded using the Concern Reporting application and 20 in Incident & Measurements application.

## **4. Challenges**

### **Work-Related Musculoskeletal Disorders (WMSDs)**

The SMUD Safety Team continues to partner with business units to a reduce all WMSD's. In this hybrid Awards work environment, Safety continues to conduct Ergonomic evaluations in the office, field, and virtually for remote workers, to meet the needs of the workforce. Safety continues to consult with a Board-Certified Professional Ergonomist and other soft tissue injury reduction specialists to review opportunities for improvements of our Ergonomics Program, such as using AI technology for assessments and data collection. The Field Ergo Committee has been actively engaging with substation, field metering and hazmat crews conducting ergonomic assessments of various work tasks. Safety and Substation leadership partnered with ergo experts to initiate a strength and physical condition pilot program with the Substation Apprentices; results have been favorable.

## **5. Recommendation**

SMUD is committed to becoming a recognized leader in safety. Both SMUD's leadership team and employees recognize that to achieve success we must integrate safety into all that we do. It is recommended that the Board accept the Monitoring Report for SD-6

## **6. Appendices - World Class Safety Program Improvements & Supporting Information**

### **Safety for Life**

Safety and Environmental Day is on track for the second year since COVID. The event will be held at Safety Center's Safetyville in October and welcomes all SMUD employees and their families. It will be Harvest theme with haystacks and plenty of decorations, kids are encouraged to dress up. Some of the events will be pedestrian safety, bicycle safety, and a CPR class along with multiple vendors and SMUD booths like CalTrans, SCORCH, Fleet Feet, Environmental team, Sac Metro Fire, and much more!

Sparky's Crew continues to get families involved in safety by sending safety postcards and quarterly newsletters to SMUD children enrolled.

Our Safety for Life communications continue. This year we have placed emphasis on doing "About Me's" for the SMUD Safety team so employees can get to know all of the Safety Team members.

### **Driver Safety**

In 2024 Safety hosted our first driving rodeos for the Line Department. Four of these rodeos took place in April and four in June. The driving rodeo team has two more planned for fall for the Facilities team as well as the Energy Specialist team. A preventable vehicle accident team has been established and reviews SMUD's PVA's every two weeks. This team looks for trending data and uses the data during the rodeos to have discussions with the employees and prevent further PVA's. Safe driving is being emphasized in vehicle reports that are provided to directors and managers and key contacts for participating business units. The reports capture speeding as well as seat belt use. Leaders are able to use this information in their interactions to help mitigate unsafe driving behaviors as well as reinforce safe driving behaviors. Modifications to the report continue to be made based on feedback from leaders and their business unit.

SMITH training continues to be provided to new hires, as well as existing employees due for refresher, continuing to elevate their driving performance. This is performed with internal trainers and SMITH instructors alike. The Safety team also trained additional leadership under ED&O to perform driving-based SCORCH observations on their staff, adding value and focus to their observations.

Messaging in the form of highly visible banners continues to be installed in the Yard at ECOC, while opportunities for HQ Campus and Fresh Pond are under evaluation. These banners offer simple, straightforward reminders of key safe driving behaviors where they matter most – visible to our drivers while in the vehicle. Messaging in regular safety meetings has been tailored to target specific trends observed in internal accident data. Meanwhile, the safe driving decal refresh project is ongoing in collaboration with Fleet.

### **Workplace Violence**

SMUD Health and Safety team collaborated with PS&S, Security and the PMO staff to refresh the Workplace Violence Prevention Plan (WVPP) to meet new SB-553 and Cal/OSHA requirements. A few significant changes include:

- Workplace Violence Specialist (working title), which is supported by Security, PS&S and H&S.
- Incorporated in SMUD's Safety Management System a Violence Incident Log

- Learning & Development created LMS training to build awareness throughout the organization.

### **COVID-19 Support**

The safety of our employees is of utmost importance, so we continue to perform contact tracing and ensure employees report SMUD COVID-19 cases. As they are reported a dedicated team ensure that state requirements are followed. The Cal-OSHA Emergency Temporary Standard is sunseting in February of 2025, and SMUD Safety, People, Services, & Strategies, along with Communications have updated the COVID-19 guidance to meet regulation changes within the Cal-OSHA Emergency Temporary Standard as the regulation is nearing sunseting. Our third-party vendor Axiom Medical continues provide staff with illness leave guidance. Our process continues to be followed and has prevented large outbreaks or work stoppages to critical areas of operations.

### **Wildfire Smoke**

In April of 2023, the HRO Safety Team reviewed the Health & Safety Standard for Wildfire Smoke for any gaps and collaborated with other work groups to ensure any necessary equipment, to reduce employee exposures were available and ready to deploy. In addition, there was a review and update of the Wildfire Smoke Training to ensure field crew members received information on how to access resources, should a Wildfire Smoke event occur. The training was delivered to all field crew personnel in June 2024. Examples of resources available to SMUD employees are: the use of the Purple Air monitoring system, in cab vehicle HEPA air filters, PPE, and scheduling. This year, to date, we have had 1 day of notifications. This was only an air quality status report due to a local fire that had broke out. AQI threshold did not exceed 150. Staff is also researching new wildfire smoke applications such as Watch Duty, which can help track fire that impact our infrastructure and field personnel.

### **Fire Retardant Clothing**

All employees who work on or around energized equipment are allotted a yearly FR Clothing allowance to ensure they are adequately protected. To ensure employees have access to clothing which meets the Arc Flash requirements of SMUD equipment and the latest FR material technologies to improve their level of comfort in various types of weather conditions (i.e., storms, cold, rain, or heat), Safety works with the FR Vendor, to host an annual review (in the Fall) of the latest offerings from the top FR Clothing Manufacturers and a sample of affected SMUD employees, for input. Safety is in process of scheduling this annual review. New employees of the electrical trades will receive FR Clothing Training by a Safety Representative to ensure employee is added to the FR Clothing portal and is apprised of the proper care and maintenance of their clothing.

### **Joint Labor Management Safety Committees**

**Hydro JLMSC** – Advanced First Responder training was completed to comply with Cal/OSHA standards regarding the administration of breathing air and stop-bleeding apparatus. Confined Space Rescue training has been completed amongst the field staff to ensure prompt response to any confined space rescue needs. Loon Lake Machine Hall evacuation procedure has been finalized and will be followed up with the production of a training video as well as evacuation exercises.

**Line Assets JLMSC** – A variety of safety improvements are in progress or already completed through the Line Assets JLMSC. Key improvements to highlight are: 1) Partnership between Line, Warehouse and Safety to update the inventory of Trauma Bags, including inspecting

current trauma bags, replacing expired materials and adding in new products such as splints and tourniquets.2) Partnership between Line, Public Safety and Communications to develop a communication plan with customers to highlight the importance of maintaining clear access to SMUD equipment on customer properties for both customer reliability and safety of our employees. 3) Line, Safety and Telecom partnered to identify a solution to a communication issue during Helicopter operations. Solution has been identified and is currently in the process of being funded, purchased and built.

**Substation JLMSC** – A Substation emergency response procedure was established and implemented. Tabletop and on-site exercises were conducted with both the work group personnel and the Emergency Preparedness Team to verify validity of this procedure and process.

## **Safely Conducted Observations Reduce Common Hazards (SCORCH)**

### **Observation Engagement & Behavior Trends**

For the first half of 2024, a total of 2471 employees were observed under the Office & Professional process. **Head/Neck Posture** was both the top safe and at-risk behavior for this time frame. Risk Reduction Reminders are moving the needle in a positive direction. Validated in moving from a 2<sup>nd</sup> half at-risk rating of 28.5% in 2023 to a 1st half rating of 22% in 2024. Resulting in a total behavior reduction rating of 6.5%. Guidance was provided for elevating awareness on Mondays and in the AM hours of the workday based on data analytics. Monitor distance and height tips combined with job aids for adjusting font and display settings are also proving to be effective. Reminders were shared in monthly Safety for Life meetings, along with providing newly created leadership specific messaging that could be inserted into employee one-on-one safety interactions/conversations, and small team meetings.

A total of 1854 field employees under the Electrical Trades and CFAS process, were observed for the 1st half of 2024. Observation feedback displayed the consistency in which Hand Protection was worn, making it the top observed safe behavior. Observation feedback highlighted the consistency in which employees took steps for minimizing exposure by wearing the proper type of glove per task, importance of proactively testing and making sure gloves are free of holes and tears. Opportunity for improvement was related to the top at-risk behavior of **Knee Protection/Ergo Mat**. Employees displayed a low perception of risk and awareness for potential soft-tissue related injury when performing kneeling/ground contacting task. Risk Reduction Reminders stressed the benefits of providing the knees a cushioned working surface no matter the frequency or duration. Though most employees use the ergo mat, the use of knee pads (attached to the body) was recommended to reduce leaving the kneeling mat behind in the truck and/or the lack of willingness for dragging it from location to location. Tips for considering knee pads as “shoes for the knees” spoke to the health benefits of how knee padding is designed to distribute pressure across the entire knee area, as well as to absorb some of the impact associated with moving around, shifting weight when changing positions or “walking” on your knees. We anticipate this behavior to trend and a positive fashion over the upcoming quarters.

### SCORCH Behavior Influencing Highlights:

- **Internal Engagement** – After attending DEKRA’s 2024 National Safety in Action Conference in April. Committee members held a two-day (In-person/virtual) SCORCH Mini Conference to share lessons learned. A total of 12 presentations were provided to all employees highlighting personal ownership and awareness for working safely. Topic

shares ranged from Fending off Fatigue, Back Injury Prevention School, Surprising Impact of Happiness at Work and Human Performance & Serious Injury and Fatality Potential. Positive feedback related to the relevance and thought-provoking topics was received from attendees with high audience numbers for both the in-person and virtual formats. SCORCH continues its tradition for sharing conference obtained information beyond its participating workforces, proudly sharing obtained best practices with all SMUD employees seeking inspiration via its mini conference. A big thank you to the leaders that showed their process support by sponsoring employees from their departments to attend the event and to leaders like Alex Williams and Terry Mcnemar for attending and experiencing the event first-hand along with presenting at our mini conference. SCORCH seek to put attending the 2025 Safety in Action Conference on the radar of the large number of new leaders across SMUD as part of its efforts to expand the use of behavior-based safety throughout the organization.

- **Timely Process Updates** – Digital monitors installed in the Substations and Field Metering departments are used to provide specific information related to the number of current and year-to-date observations completed. Top trending safe and at-risk behaviors, along with Risk Reduction Reminders. This visible platform for leveraging and broadcasting the real time data capabilities of the Safety Management System has been positively received. This allows for more proactive behavior adjustments to be made within the month/quarter versus the reactionary sharing of the data primarily in safety meetings. The success of this process pivot has garnered the attention and request by additional departments to install safety themed monitors. SCORCH is extremely excited and believes this will be a highly effective tool for maintaining a steady level of engagement, self-ownership for working safely and continuous education.
- **Safety RoadMap Alignment** – SCORCH continues to partner with the High-Risk Operations team and Safety Management System (SMS) app lead, Jackie Reames to insert behavior-based safety examples and definitions into traditional safety investigation practices. The investigation templates for both vehicle (PVA's) and (injury) incidents, have been updated to include a CBI (Critical Behavior Inventory) behavioral selection option. This will enhance the supervisors and investigators behavior identification ability, the extraction of specific job task behaviors. This will also allow us to generate historical and trending vehicle and injury incident data for both participating and non-participating work groups. This will prove to be one of the most effective ways in which SCORCH displays its flexibility and willingness to make process modifications to allow for greater utilization of its principles, taking bold steps to performing at a World-Class safety level.
- **External/Community Engagement** – SCORCH with its 23 years of behavior influencing success was asked to present and provide its behavior-based best practice share at multiple safety events. This encompassed presentations at the DEKRA, Safety in Action Conference, (ASSP) American Society of Safety Professionals and the Region IX (VPPPA) Voluntary Protection Program Participants Association, Safety Summit. Presentations highlight the creative ways in which behavior awareness can expand beyond the workplace and easily inserted into employees at-home and at-play environments. This displays SMUD's cultural commitment to Safety for Life and behavior-based safety as a lifestyle choice that intentionally engages family and friends.



## **Confined Space Rescue**

SMUD's Confined Space Rescue program has expanded to include more robust training and support for field forces and safety trainers alike. These improvements help our field forces to be better equipped to both prevent and respond to real-world emergency situations.

During Bundled Training, field forces receive hands-on practice with entries and mock-rescue scenarios, specific to SMUD's confined spaces. This was expanded to include additional groups who had not previously received this level of training. Additionally, these scenarios are undergoing review to maximize training value and consistency. Improvements were also made to SMUD's confined space rescue equipment inspection, maintenance, and tracking operation this year. The rescue equipment necessary to perform this work was inspected by the manufacturer, Toolroom's inventory was updated to include in-service equipment, and additional equipment was purchased to meet the evolving needs of our field forces.

In Q2, the Safety team also leveraged existing relationships with local confined space technical rescue contractors to ensure all SMUD field forces have access to these services. This has primarily benefited the Substations group and their transformer entry operations. Safety collaborated with one of these contractors and developed an updated rescue plan. As a result, the Safety department is prepared to deliver this complex training and provide related support to field forces on an as-needed basis. Simultaneously, Safety explored the use of new technologies to allow semi-remote inspection of transformer components, which reduces employee risk exposure by eliminating the need for entry into a high-risk environment.

With Hydro Operations consisting of multiple remote locations, employees from various work groups have undergone Non-Entry Confined Space Rescue training in order to provide prompt rescue services in-house. Along with this initial training, an annual refresher and real-life scenario mock rescue will occur. Rescue equipment upgrades and additions are underway, including an enclosed trailer dedicated to CSE Rescue equipment to ensure efficient mobilization.

## **Heat Illness**

SMUD continues to identify heat as one of the main hazards our employees face during the hot summer months. SMUD continues to train field-based employees each year on the signs/symptoms of heat illness, appropriate measures to reduce the potential for heat illness, as well as how to respond appropriately in the event of a heat related emergency. SMUD's tool room continue to offer a variety of solutions to combat working in the heat, including: water, ice, coolers, electrolyte supplements for water, portable shade structures, shade visors for hard hats.

The Network/Underground work group purchased and deployed an additional cooling trailer unit that can be used to provide both confined space ventilation as well as cooling of the air inside hot underground facilities during summer months. This reduces potential heat stress to the employees and allows for a safer work environment.

## **Medical Monitoring**

With the departure of our Onsite Medical Services provider EOMC, the health and safety team has begun migrating services to new vendors. This has included the use of onsite "pop-up clinics" to limit the need for SMUD employees to travel to off site clinics. SMUD is working with the new vendors to migrate applicable records as well as set up dashboards that will be used to track employee being seen for Medical Monitoring. Health and Safety will continue throughout

the year to ensure all employees are current on their medical monitoring. With the new medical surveillance monitoring program, the safety team had over 70 employees from our Hydro-Operations go through the process with the new vendor in June.

**Awards**

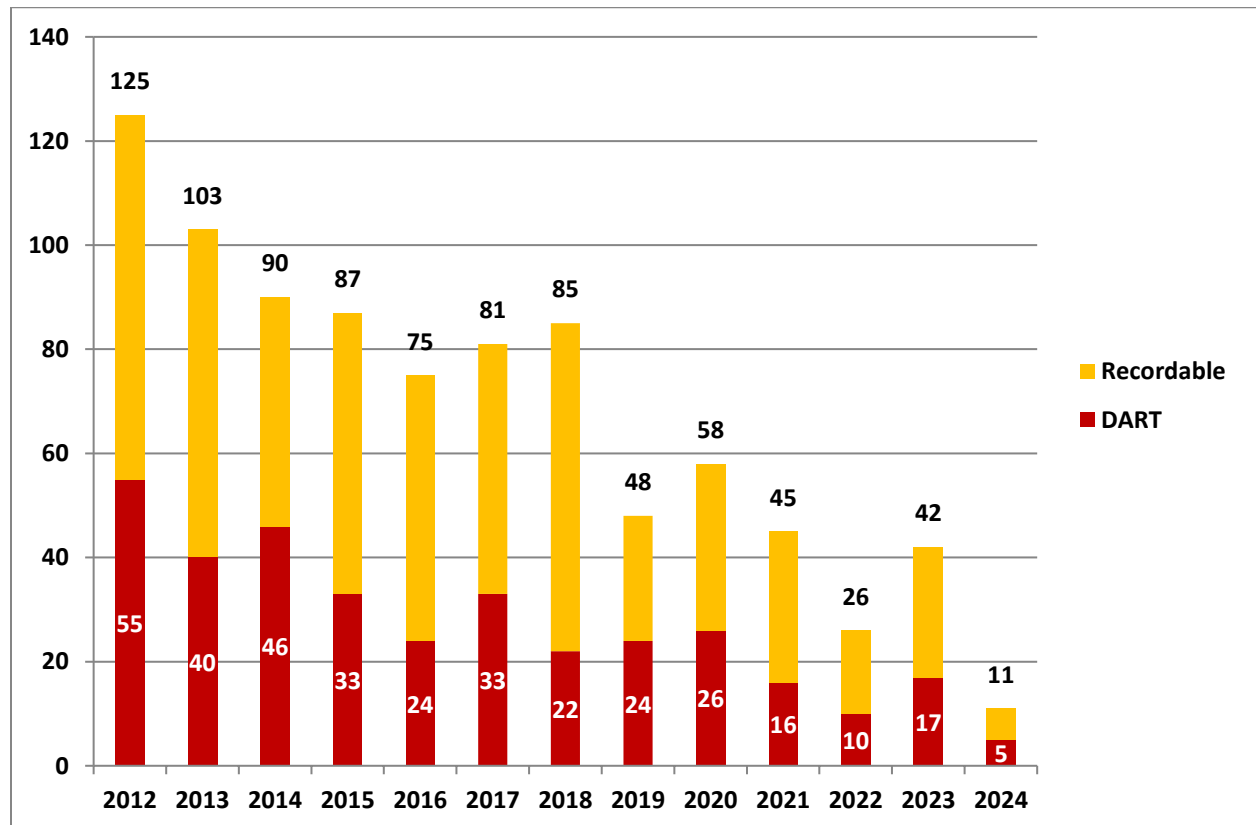
The American Public Power Association (APPA) recognized the top utilities from across the country for their safe operating practices in 2023. We're excited to announce that SMUD earned the APPA's 2023 Safety Award of Excellence, achieving Diamond Status. The Diamond designation is the highest status awarded by APPA to utilities who demonstrate a strong commitment to its employees, customers and the community. The Diamond Status was awarded to SMUD during Q1 of 2024.

The Northwest Public Power Association (NWPPA) awarded SMUD with 3<sup>rd</sup> place in their 2024 Safety Awards. The award is based on a utility's incident rate caused by injury or illness cases, and the severity rate, or lost workdays, in 2023.

The National Safety Council (NSC) recognized SMUD in Q1 of 2024 for the 2023 Occupational Excellence Achievement Award. This award recognizes organizations with injury and illness records better than or equal to 50% of the Bureau of Labor Statistics for their NAICS code.

**Appendix A**

**DART Count and OSHA Recordable 2012-2024**





SSS No.
ZCES 24-009

# BOARD AGENDA ITEM

## STAFFING SUMMARY SHEET

Committee Meeting & Date Policy – 10/09/24
Board Meeting Date October 17, 2024

TO		TO	
1.	Lora Anguay	6.	
2.	Claire Rogers	7.	
3.	Farres Everly	8.	
4.	Suresh Kotha	9.	<b>Legal</b>
5.	Brandy Bolden	10.	<b>CEO &amp; General Manager</b>

<b>Consent Calendar</b>	<input checked="" type="checkbox"/>	<b>Yes</b>		<b>No</b> <i>If no, schedule a dry run presentation.</i>		<input checked="" type="checkbox"/>	<b>Yes</b>		<b>No</b> <i>(If no, explain in Cost/Budgeted section.)</i>
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FROM (IPR) James Frasher	DEPARTMENT Research and Development	MAIL STOP A210	EXT. 6082	DATE SENT 9/25/2024
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**NARRATIVE:**

**Requested Action:** Accept the monitoring report for **Strategic Direction SD-10, Innovation.**

**Summary:** The purpose of this meeting is to facilitate a discussion with the SMUD Board of Directors on Strategic Direction SD-10, Innovation. The presentation will briefly summarize SMUD’s innovation pilots and research initiatives and the role this work plays in achieving the Zero Carbon Vision.

**Board Policy:** Strategic Direction SD-10, Innovation  
*(Number & Title)*

**Benefits:** The Zero Carbon Plan relies on new technology and business models to fully achieve zero carbon. Innovation, directed by SD-10, guides research into game changing technologies, design of pilot programs and the focus of research projects.

**Cost/Budgeted:** Contained within internal labor budget.

**Alternatives:** Provide information via written report through the Chief Executive Officer and General Manager

**Affected Parties:** SMUD customers and employees

**Coordination:** The innovation portfolio is cross cutting across the entire enterprise.

**Presenter:** James Frasher, Director, Research & Development, Grants & Partnerships

<b>Additional Links:</b>
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<b>SUBJECT</b> <b>SD-10, Innovation Board Monitoring Report</b>	<b>ITEM NO. (FOR LEGAL USE ONLY)</b>
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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:** September 25, 2024

**FROM:** Claire Rogers *CR 9/25/24*

**SUBJECT: Audit Report No. 28007754  
Board Monitoring Report; SD-10: Innovation**

Internal Audit Services (IAS) received the SD-10 *Innovation* 2024 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 IAS' 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 2024 Strategic Direction SD-10, Innovation



## 1) Background

Strategic Direction SD-10 states that:

Delivering innovative solutions, products and services to our customers is a core value. To assure our long-term competitiveness, SMUD shall invest in research and development projects that support its core and key values, and integrate emerging technologies and new business models into SMUD’s customer offerings in a way that balances risk and opportunity and benefit our customers and community.

## 2) Executive Summary

**SMUD is in compliance with SD-10 Innovation.** To assure SMUD’s long term competitiveness and delivery of the Clean Energy Vision, the Research & Development (R&D) team provides subject matter expertise, project planning and execution in support of SMUD’s core and key values. R&D evaluates emerging technologies and business models and accelerates integration into SMUD’s operations in a way that balances risk and opportunity. The R&D portfolio is focused on enabling the thermal transition, scaling load flexibility, and facilitating electrification of buildings and transportation. We support SMUD through research, analysis, development and demonstration of emerging technologies that benefit our customers and community, transition of vetted technologies into operations, and analysis of energy and climate change policies.

SD Requirement	Purpose	Outcome	Notes
<b>Project Implementation</b>	Project distribution indicates breadth of portfolio diversity and prioritization of program areas.	22 active projects in 2024. 5 projects are complete as of August 1, 2024 <sup>1</sup> .	This reflects a 33% decrease in active projects and 17% reduction in completions compared to previous reporting period.
<b>Risk</b>	Technology risk assesses ability to meet expected performance goals. Implementation risk assesses probability of deployment.	86% of projects are deemed low to medium-low technology risk. 82% are deemed low to medium-low implementation risk.	The risk portfolio is consistent with the previous reporting period. Potential risks are managed by creating a diversified portfolio and partnering with other entities to distribute risk and mitigation.
<b>Benefits</b>	Research stage and benefits timeframe indicate the relevance of portfolio to address customer needs and strategic planning.	64% of projects are in stages 4-5 <sup>2</sup> . 86% are expected to provide benefits to SMUD or customers within 5 years.	Percent of stages 4-5 is consistent with 2023’s 73%, reflecting the focus on near-term applications. Benefits time frame is consistent with 2023.

Table 1: SD Requirements Compliance

<sup>1</sup> Reporting metrics and achievements reflect the reporting period of August 1, 2023 – July 31, 2024.

<sup>2</sup> Stage 1 - Preliminary Investigation, Stage 2 - Concept Definition/Lab scale, Stage 3 - Concept Development (Prototype/bench scale), Stage 4 - Technology Development and Verification (pilot scale; field testing), Stage 5 - Commercialization

### 3) Additional Supporting Information

**Project Implementation:** SMUD's Research and Development team has the primary responsibility of meeting SD-10; however, notable innovation occurs throughout SMUD.

#### **Electric Transportation (ET)**

Transportation electrification improves air quality and reduces net greenhouse gas emissions and petroleum consumption to support energy sustainability, while creating new revenue streams for SMUD. This strategy is supported through investigation of mitigation of grid impacts due to charging, improvement of electric vehicles (EV) value via pricing signals and remote controls, increased EV adoption and access to charging. SMUD is specifically exploring multiple opportunities to expand our understanding of managed charging (V1G) and Vehicle-to-Grid (V2G) capabilities, applications, and implications.

#### Key Achievements:

- SMUD has the eFuel program ready to deploy EV chargers to underserved multi-family homes as part of the ChargeReady Community project, a \$2.23M California Energy Commission REACH grant awarded to SMUD in 2022. Final agreement execution with Mutual Housing will enable construction to begin later this year.
- The Del Paso Mobility Hub (three level 2 and one DC fast charger) started public operations in October 2023. Based on two quarterly reports received so far, project economics rely heavily on grant funding for long term viability. Majority of revenue is from DCFC utilization (mostly by drivers coming from the freeway nearby).
- The Residential Managed EV Charging pilot has enrolled over 1,200 vehicles from Tesla, GM, Ford and BMW. Early results show modest load impacts. Staff are working with the evaluator to refine the analysis estimating success of pilot in reducing future transformer overloads.
- SMUD was awarded \$2.9 million by the California Energy Commission to deliver the FAST grant, deploying 150+kW fast chargers at the Sacramento International Airport, Sacramento Valley Amtrak Station and Sacramento State University. These stations will offer public charging at an affordable rate for all users and further discounts for rideshare drivers, ensuring access to public charging at rates comparable to home charging. The chargers will be in areas where rideshare drivers already wait and queue for fares, reducing deadhead trips. Additionally, these chargers will be located in public lots, requiring no additional access fees.
- The CEC BESTFIT grant with the Twin Rivers Unified School District (TRUSD) aims to evaluate the effectiveness of managed charging (V1G) and V2G capabilities of electric school buses and light duty vehicles to balance impacts on customer and utility electrical distribution infrastructure and create value through grid services. Targeted use cases include reduced grid impacts, reduced customer infrastructure costs, wholesale cost avoidance. The site is expected to be fully operational, reporting valid usage data and controlling charging by late September 2024, pending a firmware upgrade for some of the chargers onsite. SMUD and FordPro plan to begin use case testing in late September, running through the end of 2024.

- Continued collaboration with TEPCO, Fermata, and Nissan includes demonstration of V2G on SMUD's campus using Fermata FE-20 bidirectional charger and SMUD's fleet Nissan Leaf. This charger is UL certified with endorsement by Nissan that it does not void their vehicle warranty. The vehicle charge and discharge can successfully be scheduled via API. Third-party optimization in response to price signals had some unexpected results. Staff is working through the analysis.

### **Energy Efficiency (EE) & Electric Buildings (EB)**

This program area optimizes energy delivery costs and improves grid asset utilization through targeted, time-specific energy efficiency and building electrification as well as by capturing permanent outcomes in building codes. R&D explores emerging and underutilized technologies; working to lower barriers to technology adoption.

#### Key Achievements:

- Phase 2 of the Home Infrastructure Planning project commenced, developing a model to estimate load profiles for single family residential customers after full electrification. Work will continue this year to expand the model to better represent SMUD's full single family residential population, which will help distribution planners and customers make optimal decisions regarding utility service upgrades supporting residential electrification.

### **Load Flexibility**

This program supports cost-effective, reliable, scalable flexible resource growth to serve future grid needs. R&D determines functional, operational and market viability of flexible loads to align supply and demand, give customers bill management options, improve air quality, and reduce carbon emissions.

#### Key Achievements:

- SMUD funded the New Buildings Institute and Lawrence Berkely National lab to recruit from the 32 - 120V Heat Pump Water Heater (HPWH) installations statewide last year to test the use of CTA-2045 modules for price and load response. Technical difficulty prevented the Advanced Load Up command from functioning properly, however the Load Up command still shifted 39% of HPWH load away from utility peak periods, resulting in average utility bill savings of 24% of HPWH consumption costs.
- Phase 3 DERMS features to enable market and distribution-based operation of DERs have been implemented, integrated, and tested in coordination with flexible heat pump water heaters under the PowerMinder pilot program. In anticipation of Phase 3 go-live in Q4 2024, stakeholder discussions are underway to identify DERMS enabled processes for shared visibility into DER operations by distribution and bulk system operators. The operational processes include coordination with planning stakeholders to recognize avoided long-term costs, displaced by flexible DERs.
- Smart inverters allow utilities to monitor residential PV and storage (potentially as an alternative to generation submeters) and provide control functionality to assist in grid support. This project will test smart inverter connection via two pathways: direct connection and through vendors/aggregators. Data analysis was completed for the Direct Connection pathway, which used the IEEE 2030.5-CSIP protocol successfully in



the majority of tests without issue. There remain some interoperability issues that hopefully will largely be fixed in the next 3.0 update. The Vendor/Aggregator pathway has gone through lab testing with a IEEE 2030.5-CSIP server and will start customer testing by Q4 2024. Direct connection will assist in development of the DERMS, while the vendor/aggregator pathway will leverage OEM and aggregator relationships to establish pilot access agreements to a broader range of smart inverters.

### **Thermal Transition**

R&D pursues innovative grid, storage and generation solutions to facilitate SMUD's goal of zero carbon by 2030 and accelerate interconnection of grid-connected systems and devices to ensure safe and efficient operation. This program supports system reliability and reducing emissions through alignment of DERs and zero-carbon generation with grid needs. It seeks to improve grid reliability through reduced outage frequency and duration; control of the distribution system, voltage and frequency variations, and overload conditions; and optimize grid benefits of DERs through advancing integration standards and coordinated automation.

#### Key Achievements:

- The ESS Phase 1 demonstration will deploy 4 MW / 30 MWh of Long Duration Energy Storage (LDES) iron flow batteries. This project will compare the reliability and uptimes of LDES and Lithium-Ion batteries as part of SMUD's partnership with ESS. Two ESS battery models will be tested: the Energy Warehouse and Energy Center. Site Acceptance Testing (SAT) and troubleshooting continues to be in progress for the 6 Energy Warehouses deployed. SMUD was awarded a \$10 million grant from the California Energy Commission to test 3.6 MW of the Energy Center product as part of the ESS Phase 1 demonstration. Preliminary design of the Energy Center build is in process in preparation for the Engineering Procurement and Construction solicitation.
- Renewable Natural Gas (RNG) and Green Hydrogen remain the leading alternative fuel candidates to convert and decarbonize thermal generation fleet operations longer term. SMUD continues to be engaged in the CEC Hydrogen Blending grant led by UCLA and the DOE Hyblend grant led by NREL. SMUD is pursuing participation in Phase 2 of the DOE Hyblend grant.

### **Climate Change**

This program provides technical, economic, and policy expertise on climate change and impacts to SMUD territory. It compliments SMUD's Zero Carbon Plan and aligns with our board direction to address climate vulnerabilities, and we partner with our customers and community on mitigation opportunities and regenerative, net positive projects.

#### Key Achievements:

- Carbon Farming and Ecosystem Service Research is a four-year study aiming to restore California prairie and native pollinator habitat under PV panels and in surrounding perimeter areas at Rancho Seco II. In its second year, the project completed a second native pollinator seeding within the panels, installed a half mile of hedgerow with native

shrubs and perennials and three other demonstration gardens in the Recreation Area. The project's focus is shifting to emphasize low-maintenance methods on an expanded footprint and an effort to achieve Bee-Better Electric certification. This project will help identify and demonstrate strategies to integrate ecosystem services and agricultural value into large scale solar projects, helping to mitigate their environmental impact and build public support for their continued construction, assisting SMUD in achieving the 2030 ZCP.

- In partnership with the Environmental Services team staff launched an updated Climate Vulnerability and Risk Assessment, including a refresh of the latest climate science relevant to existing infrastructure and projects planned under the ZCP. Deliverables include a framework for evaluating and prioritizing climate resilient investments, integration into long-term planning efforts and a new staff training module.

### **Enterprise-Wide Innovations**

While SD-10 innovation goals are met by R&D research programs, additional notable achievements occurred across SMUD supporting progressive customer offerings.

- Acceptance testing of DERMS Phase 2 features for localized DER operations was completed in Q2 2024. Acceptance testing of Phase 3 features for DER market operations, including integration with the Virtual Peaker DER platform, was completed in Q3 2024. Both DERMS phases 2 and 3 are scheduled to go live Q4 2024.

**Summary:** As SMUD advances toward implementation of the 2030 Zero Carbon Plan, R&D has ramped up support for thermal transition and load flexibility technologies and business models, focused on energy storage and electric transportation, while continuing to advance research in climate change and technologies that enable building electrification. These innovations help mitigate grid infrastructure impacts, maintain customer choice and offer new solutions toward a low carbon future. Our diverse portfolio helps maintain long-term competitiveness and balance risk with potential environmental and economic benefits, ensuring community benefits.

**4) Challenges:** 2024 began a concerted return to office campaign for most staff, which still includes remote work about half the time. Vigilance remains due to the ongoing health impacts of COVID-19. Supply chain and inflationary impacts continue to be felt in new procurements. Staff resources remain focused on providing subject matter expertise for efforts supporting zero carbon by 2030, balanced between grant planning, acquisition and delivery to reduce SMUD's costs for R&D and project planning and implementation.

**5) Recommendation:** Recommend the Board accept the SD-10 Monitoring Report.

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**Table 2: R&D Projects**

Research Program	ID	Project Name	Project Description	SD-10 Benefits	Start Date	End Date	Ward
Building Electrification	120	Home Infrastructure Planning Phase II (HIP II)	This project is developing a Residential End State model to provide load growth insights and intelligence to optimize decision-making for distribution system upgrades, recommend program offerings, and estimate the likely magnitude of impacts from residential electrification due to panel upgrades and distribution grid upgrades.	Better understanding of the infrastructure needs for fully electrified residences should help reduce the costs incurred by SMUD and our residential customers as they electrify their homes and vehicles. This will help to reduce future rate increases expected from the 2030 Zero Carbon Plan and accelerate our decarbonization transition of residential homes.	5/1/2023	12/31/2024	All
Building Electrification	67	St. Francis Manor Central HPWH Study	SMUD staff monitored the performance and benefits of converting a gas powered (boiler) domestic hot water system to a heat pump water heater (HPWH) driven system and found that primarily due to incorrect flows/piping of the water flow and the addition of a kitchen, there was insufficient hot water throughout the whole year for the tenants/kitchen. However, solutions have been identified (adjust the direction of the water flow and install a dedicated HPWH for the kitchen) to meet the customer's needs and deem this project as a successful option for businesses to electrify.	Prior to the addition of an unplanned commercial kitchen, the impacts of the original water heater electrification project were as follows: Estimated savings of \$2,233 annual energy cost saving (20%) compared to gas boiler (54% reduction in CO2 emissions). Conclusion: HPWH system is a cost-effective replacement for any building that already uses a central water heater	4/1/2021	9/30/2023	5

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Climate Change	64	Carbon Farming and Ecosystem Service Research at RSSII	Conduct field experiments at Rancho Seco to research ecosystems and evaluate the use of native species/pollinators to reduce the operational costs associated with vegetation management, erosion control, and fire protection. The project will explore the effects of vegetation and panel layout on PV generation and soil carbon.	The project will help identify and demonstrate strategies to integrate ecosystem services and agricultural value into large scale solar projects, helping to mitigate their environmental impact and build public support for their continued construction, assisting SMUD in achieving the 2030 ZCP.	1/30/2021	1/30/2026	2
Electric Transportation	107	V2G Commercial Expansion	This project will build off the electric school bus project with Twin Rivers Unified School District. We will demonstrate and test Automated Load Management, Managed Charging, and Vehicle to Grid functionality with electric school buses and other capable EVs.	Reduce grid impacts, reduced customer infrastructure build-out cost, wholesale energy or capacity cost avoidance, and mirror characteristics of stationary storage using V2G.	1/1/2022	12/30/2024	All

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Electric Transportation	97	ChargeReady Community	In early 2022, SMUD was awarded the CEC's <i>Reliable, Equitable, and Accessible Charging for multi-family Housing</i> (REACH) grant (GFO-21-603) to deploy charging infrastructure to multi-family housing units (MFHs) in underserved communities. The main goal of the project is to develop a technical and business model to inform future deployments and disseminate knowledge in the industry. Project partners include Mutual Housing and the SMAQMD. The project team will install at least 108 Level II handles at up to 11 locations in Sacramento, utilizing SMUD's eFuel program for design and construction.	Help SMUD better understand the challenges and opportunities of deploying EVSEs in multi-unit dwelling in underserved communities, helping SMUD advance the adoption of electric transportation, which contributes to GHG emissions reductions, and promoting equity in transportation.	5/11/2022	6/30/2025	All
Electric Transportation	17	Del Paso Mobility Hub	Help create an e-Mobility hub for different modes of transportation, such as taxis, transportation network company drivers, shared e-bikes, buses, etc. It includes EV charging capability as well as gig cars. The first project in execution is the Del Paso Mobility Hub.	This is a novel project and transportation facility concept. It includes electric and fuel cell vehicles, including an electric shuttle, EV charging, shared vehicles, electric micro-mobility (ebikes and electric scooters) and transportation services.	9/1/2022	2/28/2025	5
Electric Transportation	125	EPRI EVs2Scale2030	The "EVs2Scale2030" initiative is a three-year commitment focused on leveraging the scale of the utility industry to help galvanize and align all market stakeholders as electric vehicles are deployed at scale and as EV goals increasingly target 50% EV market share by 2030. The initiative will focus on what needs to get done over the next 7 years to reach the 2030 goals. EPRI plans to broadly collaborate with utilities, vehicle manufacturers, charging providers, industry experts, trade associations, consumer groups, civil society, federal agencies and labs to support the rapid deployment and charging of millions of electric vehicles – while minimizing grid impacts and enabling critical grid benefits.	Deliverables will include best practice templates and guidelines for various areas in transportation electrification, the nation's most comprehensive and consolidated resource for industry stakeholders, including utilities and state agencies, to vet products and equipment for the deployment of electric vehicle charging and hardware systems, two new software tools:  eRoadMap2030 - an industry-first fleet data collection and analysis that provides the necessary data-backed level of detail to provide utility leaders and regulators data-supported confidence for proactive, focused grid investment needed to meet 2030 electrification goals. GridFAST - A platform-based grid interconnection online data exchange to expedite the sharing of fleet electrification plans and grid capacity between fleet customers and distribution planners.	7/14/2022	12/31/2026	All

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Electric Transportation	104	Light Duty Fleet V2G	This project will test and demonstrate V2X functionality on campus with a Nissan Leaf and Fermata chargers. In partnership with TEPCO (Tokyo Electric Power Company) we will evaluate the interconnection process, installation requirements, and V2X functionality. Furthermore, we will explore the V2X optimization systems using the simple price API from both Virtual Peaker and Fermata. This demonstration and evaluation will help us discover issues and gain insights into V2X in a very low risk environment. This research will help inform a potential V2X pilot in the future.	Informed deployment of light-duty V2X will reduce grid impacts and customer infrastructure build-out costs. LDV fleet management can also offer wholesale energy or capacity cost avoidance, and mirror characteristics of stationary storage.	1/1/2022	12/31/2024	All
Electric Transportation	22	Residential Managed EV Charging (V1G)	Actively manage residential EV charging times and peak power consumption. Managed EV charging can enable deferral of distribution system upgrades, smooth the duck curve, reduce renewable generation curtailment, and provide import and export arbitrage opportunities.	Benefits include reduction of the financial risks associated with transportation electrification, specifically by mitigating the risk of overloading electrical distribution infrastructure. Another secondary benefit is to better align energy delivery for charging with low-cost energy supply.	10/1/2021	12/31/2025	All
Electric Transportation	24	SMUD-Owned EVSE	Operation and maintenance of SMUD's public level 2 and DCFC charging stations.	Increase EV adoption by having publicly available working charging stations in high trafficked areas.	1/1/2014	12/31/2027	All
Electric Transportation	20	Twin Rivers Commercial Managed Charging (V1G, V2G)	Incorporate electric school buses and light duty vehicles to evaluate the effectiveness of managed charging and vehicle-to-grid capabilities to balance impacts on customer and utility electrical distribution and create value through grid services.	V1G findings will support smart charging applications which can mitigate customer charging costs and support grid management and deferred infrastructure upgrades. Reduce grid impacts, reduced customer infrastructure build-out cost, wholesale energy or capacity cost avoidance, and mirror characteristics of stationary storage using V2G.	1/30/2021	9/30/2024	5
Energy Storage	119	ESS Energy Center Flow Battery R&D	Project will deploy 29 ESS Energy Centers at Hedge Solar Farm. These centers will be 3.55 MW/28.4 MWh of long duration energy storage. The project will test the reliability and uptimes for comparison of LDES and Lithium-Ion batteries.	This field demonstration will test the reliability and technical parameters of the ESS long duration flow batteries in comparison to lithium-ion batteries as well as the ability to scale up to larger installations of 200MW.	5/1/2023	7/1/2027	3
Energy Storage	122	Hedge 4 MW/8MWh Monitoring and Maintenance	Operation of a 4 MW / 8 MWh utility-scale storage battery to test different operational modes and grid interactions.	The operation and testing of the Hedge Lithium-ion battery will inform the installation and direction of SMUD's future battery projects as they ramp up to meet the 2030 plan of ~3000MW of renewables and storage.	1/20/2024	1/19/2029	3

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Energy Storage	5	Residential Energy Storage Programs	Continuation of Residential BTM energy storage systems including Commitment to Operate, Smart Energy Optimizer, and PowerMinder. Study of these systems will answer research questions regarding how customers respond to dispatch models, what communication standards could promote battery manufacturer relationships and data communication quality.	Residential BTM energy storage are customer-facing innovations that will provide resilience and system benefits to customers and SMUD alike. This work will inform future pilots including Multi-DER and Capacity Contracts VPPs.	1/1/2021	12/31/2023	All
Energy Storage	6	Hedge Utility-Scale Battery	Deployment and operation of a 4 MW / 8 MWh utility-scale storage battery to test different operational modes and grid interactions.	The Hedge Battery supports the StorageShares program and SMUD's goal of adding 1,100 MWs of battery capacity in the coming decade. Proximity to the Sacramento Power Academy training facility will foster opportunities for workforce development in battery storage operations.	3/1/2019	6/30/2024	3
Generation and Sequestration	124	TC Biomass to Hydrogen Production and Delivery Facility Site Evaluation	Mote in collaboration with SMUD was awarded \$500k by the CA Department of Conservation Forest Biomass to Carbon-Negative Biofuels Pilot Program. The project motivation has the end goal of using waste biomass from clearing the UARP transmission corridor for Thermochemical conversion to hydrogen. This grant project will focus on candidate site selection, pre-construction project validation and engineering, community benefits plan, and begin Front-End Engineering Design (FEED) for consideration as a potential project for development.	This project provided insight that the high cost of building a facility to produce green hydrogen would need to heavily depend on grant funding to get close to an acceptable return on investment.	1/1/2023	12/31/2023	All
Generation and Sequestration	34	Dairy Digesters eRIN Applications	Develop and submit the biogas-to-electricity pathway applications for Van Steyn, Van Warmerdam and New Hope dairy digesters under the Renewable Fuel Standard (RFS) for electricity Renewable Identification Number (eRIN) credits, generated when electricity produced from dairy digester biogas is used to charge electric vehicles in SMUD service territory.	The use of eRIN credits could unlock \$0.12/kWh to \$0.33/kWh of electricity generated for electric vehicle charging. This legal and financial innovation offer sound investment into biofuels production and carbon-negative transportation for electric vehicles.	1/1/2021	12/31/2023	7
Generation and Sequestration	77	NET Power - Allam Fetvedt Cycle (Super Critical CO2 Cycle) Study	Participation in the EPRI SDF which will perform research on the Allam Fetvedt Cycle for supercritical carbon capture. The project will yield a technology assessment, value proposition, and analysis of SMUD-focused applications.	Key information provided by this project helped SMUD determine that the Allam-Fetvedt Cycle is not ready for commercial investment and deployment.	4/28/2021	12/31/2023	All

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Grid Evolution	45	Transmission Line Monitoring	Test the achievability and usability of Dynamic Line Ratings (DLR) to inform short-term operational and long-term planning decisions, using the LineVision V3 monitoring system.	Increases efficiency of transmission asset utilization while maintaining reliability. Advanced line rating methodologies can result in cost savings and operational benefits. It was determined that with optimal usage of the DLR system there is value well in excess of the cost of the system. It was decided that further exploration was needed with a follow on project headed by PSO to determine how much of that value we can actually capture.	4/22/2021	12/31/2023	All
Load Flexibility	69	EnergyKit HEMS field demo	Ynventive, CLTC, Panasonic and SMUD have partnered to install the EnergyKit home energy management system into eight residential homes and evaluate it's performance managing residential loads in response to price signals and demand thresholds.	Assuming the EnergyKit EMS performs as expected, it could enable customers to reliably shift their loads due to price signals and provide an alternative to panel upgrades for capacity constrained customers interested in electrification.	4/30/2021	12/31/2024	All
Load Flexibility	89	Smart Inverters	This project will test smart inverter connection via two pathways: direct connection and through vendors/aggregators. Direct connection will assist in development of the DERMS, while the vendor/aggregator pathway leverage OEM and aggregator relationships to establish pilot access agreements to a broader range of smart inverters.	Smart inverters are new technology that allows SMUD to monitor residential PV and storage and provides control functionality to assist in grid support. Ensuring that IEEE 2030.5-CSIP is a reliable communication protocol will help open up this communications pathway for many devices.	7/1/2021	12/31/2024	All
Innovation	118	EPRI Global Innovation Effectiveness Assessment	This assessment revealed a depressed internal perspective of SMUD's innovation effectiveness, which is being interpreted in two parts: first, the rate at which SMUD has adopted innovation into business as usual has raised the bar for what staff consider innovative, and two, the positive results of innovative processes such as the enterprise prioritization process had not yet been realized at the staff level by the time surveys and interviews were conducted.	The benefit of this assessment is to leverage insights from this assessment to enhance our innovation outcomes and ultimately deliver more customer and stakeholder value.	11/10/2022	12/31/2023	All

**Table 3: Enterprise-Wide Initiatives**

Initiative Name	Initiative Description	Initiative Benefits	Start Date	End Date	Ward
DERMS	Strategic business partnership with OSI to develop a Distributed Energy Resource Management System whereas SCADA and behind the meter resources can be used to solve distribution constraints, participate in the market, and manage flexible loads.	Leverage DER capabilities to meet economic objectives, peak load reduction, local constraint issues, deferred infrastructure investment, and grid optimization. As OSI's partner, SMUD shares revenue from future sales.	2018	2028	All





SSS No.  ZCES 24-010
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## BOARD AGENDA ITEM STAFFING SUMMARY SHEET

Committee Meeting & Date Policy – 10/09/24
Board Meeting Date October 17, 2024

TO		TO	
1.	Lora Anguay	6.	
2.	Claire Rogers	7.	
3.	Farres Everly	8.	
4.	Suresh Kotha	9.	<b>Legal</b>
5.	Brandy Bolden	10.	<b>CEO &amp; General Manager</b>

<b>Consent Calendar</b>	X	<b>Yes</b>	<b>No</b> <i>If no, schedule a dry run presentation.</i>	<b>Budgeted</b>	X	<b>Yes</b>	<b>No</b> <i>(If no, explain in Cost/Budgeted section.)</i>
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FROM (IPR) James Frasher	DEPARTMENT New Business Development	MAIL STOP 6082	EXT. 6082	DATE SENT 9/25/2024
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**NARRATIVE:**

**Requested Action:** Accept the monitoring report for **Strategic Direction SD-19, Diversified Business.**

**Summary:** The purpose of this meeting is to facilitate a discussion with the SMUD Board of Directors on Strategic Direction SD-19, Diversified Business. The presentation will briefly summarize SMUD’s technology partnerships, community choice aggregator services and grant initiatives.

**Board Policy:** Strategic Direction SD-19, Diversified Business.  
*(Number & Title)*

**Benefits:** The Zero Carbon Plan requires the development of New Technology and Business Models to be successful. The guidance from SD-19 encourages consideration of partnerships and business models to help accelerate solutions, programs and technologies that are near market ready to transition to full commercialization. Collaboration with technology and industry partners creates mutual benefits for both SMUD and partners. SMUD’s industry leading Zero Carbon Vision allows technology and solutions to be quickly evaluated in real-world conditions. Early collaboration with technology partners can provide long-term benefits through preferred technology pricing at scale, revenue growth and improved access to technology in a supply chain constrained environment.

**Cost/Budgeted:** Contained within internal labor budget.

**Alternatives:** Provide information via written report through the Chief Executive Officer and General Manager.

**Affected Parties:** SMUD Customers, SMUD employees, peer utilities, community partners and technology developers.

**Coordination:** Evaluation of Diversified Business initiatives are cross cutting across the entire enterprise.

**Presenter:** James Frasher, Director, Research & Development, Grants & Partnerships

<b>Additional Links:</b>
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SUBJECT <b>SD-19, Diversified Business Board Monitoring Report</b>	ITEM NO. <i>(FOR LEGAL USE ONLY)</i>
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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:** September 25, 2024

**FROM:** Claire Rogers *CR 9/25/24*

**SUBJECT: Audit Report No. 28007754  
Board Monitoring Report; SD-19: Diversified Business**

Internal Audit Services (IAS) received the SD-19 *Diversified Business* 2023 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 IAS' 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 2023 SD-19, Diversified Business**

### **1) Background**

Strategic Direction SD-19 states that:

Broadening and diversifying the products and services that SMUD offers is a key value. The desired results are to: a) generate new revenues that contribute to SMUD's long-term financial health; b) spur the creation of innovative products and services; c) capture the value of SMUD's brand and intellectual property; d) better leverage and optimize SMUD's assets; and e) enable SMUD to continue to attract and retain a talented workforce.

Therefore:

- a) SMUD shall broaden and diversify its lines of business, which may include:
  - i. Being an external service provider;
  - ii. Expanding wholesale energy market opportunities;
  - iii. Capitalizing on intellectual property and assets to develop products and services either solely or through strategic partnerships;
  - iv. Selling products and services aligned with SMUD's purpose and Strategic Directions.
  
- b) SMUD shall ensure any new lines of business:
  - i. Benefit SMUD's customers and our community;
  - ii. Achieve a balanced, diversified portfolio of rewards and risks;
  - iii. Create economic value without compromising SMUD's financial health;
  - iv. Do not pose unreasonable risk to SMUD's reputation;
  - v. Align with, leverage, and optimize SMUD's strengths, assets and expertise;
  - vi. Position SMUD for the future.

### **2) Executive Summary**

- a) The 2030 Zero Carbon Plan has positioned SMUD as a leader in the utility industry. The Diversified Business portfolio utilizes that leadership position to build revenue generating partnerships with technology developers, pursue external funding (grants) to support innovation and partnership, enable technology solutions to become fully commercialized through real world pilots and demonstrations, and expand regional access to green careers.
  
- b) **SMUD is in compliance with SD-19, Diversified Business.**
  
- c) Eliminating the final 10% of emissions from SMUDs energy supply requires the development of new technology and business models. External funding

allows SMUD to accelerate the pursuit of partnerships and emerging technologies that are necessary to reach zero emissions. Without external funding many these pursuits could become cost prohibitive.

External Funding (2023)

Estimated Total SMUD Project Costs	Funds Awarded to SMUD	SMUD Cost Share
\$153,851,970	\$58,534,905	\$95,317,065

Grant funding also supports workforce development and training initiatives that help develop a talented workforce with the skills necessary to support building and maintaining a zero-carbon economy.

SMUD also supports regional partners and peers to pursue grants and other external funds that benefit the region. These funds support economic development for the region, innovation and decarbonization. In 2023, SMUD worked with Calpine to secure \$270,000,000 in grant funding to deploy carbon capture and sequestration technology at the Sutter Power Plant.

- d) Partnership benefits to SMUD may include revenue sharing agreements, intellectual property development, future pricing commitments, service-based payments and/or partner commitments to regional investment. Partners benefit from SMUDs zero carbon leadership, subject matter expertise and collaboration on real world pilots and full-scale demonstrations.

Strategic Partners and Revenue Generating Relationships

Partner	Area of Focus
AspenTech (Formerly Open Systems International, Inc.)	ADMS / DERMS
ESS Inc.	Long Duration Energy Storage
Swell Energy	Virtual Power Plant Aggregator
California Mobility Center	Mobility Innovation and Workforce Development
GridX	Data analytics and customer information platform
Simple Energy (Uplight)	Customer engagement and load flexibility
Smart Energy Water (SEW)	Customer Experience Platform Development
Community Choice Aggregators	Operational support and consulting services

## Portfolio Revenue

2023 Gross Revenue*	2023 Costs	2023 Net Revenue
\$16,065,179	\$11,926,027	\$4,139,152

\*Partnership revenue may include revenue sharing agreements, intellectual property royalties, and/or service-based payments. Future product discounts, stock warrant value, and other unrealized benefits are not accounted for as revenue.

### 3) Additional Supporting Information

a) Additional funding

Funding is most often pursued through grants; however this category is not limited to grants. SMUD considers foundation funding, disaster recovery funds, state and federal funding allocations and other sources of funding in this category. Descriptions of 2023 funding are listed in Appendix A.

b) Community Choice Aggregator Services

SMUD currently provides 11 specific services to seven (7) community choice aggregators representing 2.6M meters. SMUD has, on average, added approximately one new CCA client and one new service launch per year. Specific details on these CCA's are listed in Appendix B.

c) Technology and Industry Partners

Diversified business is often an outcome of technology and industry partnerships. These relationships often build on the successes of individual pilots, projects, or other innovation initiatives. Specific details of projects and innovation are outlined in the SD-10, Innovation monitoring report. Additional strategic partnership details are included in Appendix C of this report.

### 4) Challenges

- a) The Inflation Reduction Act along with other economic drivers continues to create an environment with significant opportunities to pursue external funding. These funding opportunities have become very high profile and as a result are becoming even more competitive. An emerging trend for larger funding opportunities is to issue awards to large coalitions of applicants or to state led initiatives rather than individual entities. SMUD often participates in these coalition applications. These larger coalitions increase the

competitiveness of applications but can also reduce the impact of those dollars for SMUD specifically and can slow the deployment of grant funding.

- b) SMUD's leadership position in pushing towards zero carbon has created a significant number of potential opportunities and partnerships to consider. The prevalence of funding opportunities and the volume of companies with a desire to work with SMUD create challenges in filtering through the volume of opportunities in pursuit of the best opportunities. Strategic partnerships are often made more complex because they often involve technologies that are not fully commercialized or market ready. This combination of technology maturity and the broad scope of funding opportunities means that SMUD must be highly selective in choosing who to partner with and which funding opportunities to pursue. Developing the correct portfolio of grants and partnerships is critical to meeting the goal and intent of SD-19. Pursuing too many initiatives in parallel can result in a lack of support on the most important areas of focus. Additionally, it is critical that the efforts pursued have strong alignment with each other and the overall zero carbon plan.
- c) Zero Carbon by 2030 is a critical and aggressive timeline. As SMUD evaluates grants, partnerships and new business opportunities, it must be done in the context of achieving zero carbon by 2030. This timeline constraint must be considered when looking at the technology and commercial readiness levels of companies SMUD is considering partnering with. Similarly, grants and other external funds that have timelines that extend beyond 2030 may lack alignment with the 2030 Zero Carbon Plan. Pursuit of diversified business to help achieve zero carbon is a priority, but this pursuit will extend beyond 2030.

## **5) Recommendation**

It is recommended that the Board accept the Fiscal Year 2023 Monitoring Report for SD-19, Diversified Business.

## APPENDIX A

### External Funding Descriptions

#### 1. GRIP 2023 (Topic Area 2-Smart Grid) Grant

**Project Name:** Connected CleanPower City

**Funding Awarded:** \$50,000,000

Connected CleanPower City will adapt infrastructure to interact with technology and customers at the grid's edge, establishing visibility, management, and control. This ecosystem, created through grid and technology enhancements, combined with an existing Advanced Distribution Management System (ADMS), will enable real-time grid management of proliferating Distributed Energy Resources (DERs), the accelerated adoption of electric vehicles (EVs) and vehicle-to-everything (V2X), intelligent buildings, virtual power plants (VPP), battery storage, and electrified neighborhoods. To manage these assets, SMUD is accelerating the integration of Distributed Intelligence (DI) at the Grid Edge, an enhanced Distributed Energy Resource Management System (DERMS), and an advanced Outage Management System (OMS) to maintain and improve grid resiliency.

Connected CleanPower City's next-generation smart grid will address the regional need for resilient, reliable grid service that is hardened for and supports the clean energy transition within SMUD and other utilities' service areas. This new intelligent ecosystem replicates effective grid management at small to large utilities with dispersed Tribal partners in rural and urban communities. The Project includes multiple elements to provide an ecosystem of intelligence that will manage the grid more effectively than the traditional top-down methodology of visibility and control.

#### 2. FAST Grant

**Project name:** SACommunity EV Hubs

**Funding Awarded:** \$2,812,421

Sacramento Municipal Utility District (SMUD), in partnership with Sacramento International Airport (SMF), Sacramento Valley Station (SVS), California State University, Sacramento (CSUS), ChargerHelp! (CH!), and AECOM, proposed the deployment of Direct Current Fast Charging stations (DCFCs) at three locations in Sacramento, enabling increased access to electric vehicle (EV) charging for ride-share drivers, food delivery drivers, rental car fleets, shared mobility services, and residents. The project will support the deployment of three fast charging hubs, with a total of 15 stations and 30 ports, strategically located in optimum locations with high on-demand transportation volume, near multi-family housing properties, and with quick and easy access to main transportation corridors. SMUD will develop a mobile app, integrated with an e-Roaming platform, to enable convenient access to locate chargers, activate



sessions, and pay for charging across multiple charging networks through a single account. Development of this single public charging interface will allow users to find, compare, and use multiple public charging options, without having to create and manage multiple proprietary apps. Development of this app and use of the e-Roaming platform will also allow SMUD to offer discounts and special rates to on-demand drivers and other target customer groups. SMUD's *SACommunity EV Hubs* project will support the Sacramento region's access to charging infrastructure for high mileage on-demand transportation services and the public. *SACommunity EV Hubs* will deploy a model that transitions charging in high-traffic communities from a constrained amenity to accessible infrastructure. These plazas will enhance access to public charging while attracting service drivers with affordable rates and shared infrastructure to ease their financial burden.

### **3. REACH 2.0 Grant**

**Project Name:** SMUD Multifamily EV Charging Community

**Funding Awarded:** \$5,000,000

Sacramento Municipal Utility District (SMUD), in partnership with the Sacramento Metropolitan Air Quality Management District (SMAQMD), Uber, and dozens of Sacramento area property owners, managers, and developers, has been awarded funding to deploy and demonstrate a replicable and scalable approach to delivering affordable electric vehicle (EV) charging for multifamily homes (MFH). SMUD Multifamily EV Charging Community proposes to deploy over 400 AC chargers at 26 multifamily (MF) residential and MF-adjacent locations across Sacramento, with 92% of sites located within disadvantaged, low-income, or affordable housing communities.

The SMUD Multifamily EV Charging Community project increases regional at-home EV charging access while testing and validating a scalable, replicable business case and promising technology solutions to catalyze the deployment of level 1 and 2 electric vehicle service equipment (EVSE) at and near MFH. The project proposes to deploy best-fit design and engineering solutions at each site, combined with a newly developed SMUD EV app featuring an integrated e-Roaming platform to offer novel rate designs through member charging networks. The project will also leverage existing programs and organizational resources to prepare for scale. The combination will deliver an equitable, streamlined, high-quality, and cost-effective charging experience.

### **4. FEMA Local Hazard Mitigation Plan Update Grant**

**Funding Awarded:** \$174,565

The FEMA Local Hazard Mitigation Plan Update Grant is a formula funding grant that offsets SMUDs costs associated with updating the local hazard mitigation plan. This plan, updated every 5 years, enables SMUD to apply for FEMA funds.

## **5. DOE Hydro Incentive Program**

**Funding Awarded:** \$210,002

The Department of Energy Hydroelectric Power Incentive is a formula fund directly tied to the amount of power generated in the UARP, for hydro facilities built after 2005. SMUD's South Fork Power House qualifies for funding under this program.

## **6. Department of Industrial Relations (DIR) Apprenticeship Incentive Program**

**Funding Awarded:** \$337,917

The Apprentice Incentive Program provides funding to support workforce training at SMUDs Power Academy. These funds reimburse costs of staff, services, and qualified equipment supporting the Power Academy apprentice training program. Some applications of these funds are hiring events including electrical trade focused events and pole climbing hiring events, on-site medical services during training events, CPR training, and curriculum development.

## APPENDIX B

### Community Choice Aggregator Detail

SMUD currently provides 11 services to seven (7) community choice aggregators representing 2.6M meters. We've averaged approximately one new CCA client and one new service launch per year. There are 24 operational CCAs in California representing 14M customers or about 36% of California. SMUD continues to invest in new CCA business activities.

Customer Care and Operations	Data and Insights	Engagement and Branding
<ul style="list-style-type: none"> <li>• Contact Center</li> <li>• Billing</li> <li>• Debt Collections</li> <li>• CRM Systems</li> </ul>	<ul style="list-style-type: none"> <li>• Data Management</li> <li>• Market Research</li> <li>• Data Analytics</li> <li>• Custom Reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Programs</li> <li>• Electrification Concierge</li> <li>• Marketing</li> </ul>

### Community Choice Aggregator Detail

Community Choice Aggregation. 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 sees the growth of CCAs as an opportunity 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 contracted with Valley Clean Energy (“VCE”). 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.

In February 2018, SMUD contracted with Ava Community Energy (“Ava” formerly East Bay Community Energy). Ava 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. Ava expanded its territory to the cities of Pleasanton, Newark, and Tracy in April 2021. An expansion of Stockton is planned for 2025.

In June 2019, SMUD contracted with Silicon Valley Clean Energy (“SVCE”). 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 October 2022, SMUD contracted with Marin Clean Energy (“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 December 2022, SMUD contracted with Sonoma Clean Power (“SCP”). SCP is a joint powers agency that serves Sonoma and Mendocino counties.

In May 2024, SMUD contracted with Central Coast Community Energy (“3CE”). 3CE is a joint powers agency representing County of Monterey, County of San Benito, County of Santa Cruz, County of Santa Barbara, Arroyo Grande, Buellton, Capitola, Carmel, Carpinteria, Del Rey Oaks, Goleta, Gonzales, Greenfield, Grover Beach, Guadalupe, Hollister, Marina, Monterey, Morro Bay, Pacific Grove, Paso Robles, Pismo Beach, Salinas, Sand City, San Juan Bautista, San Luis Obispo, Santa Cruz, Santa Maria, Scotts Valley, Seaside, Soledad, Solvang, and Watsonville. Atascadero and unincorporated San Luis Obispo County are anticipated to begin service in January 2025

In August 2024, SMUD contracted with San Jose Clean Energy (“SJCE”). SJCE is a joint powers agency that serves San Jose.

## Appendix C

### Partner List and Description

- 1) **AspenTech (AZPN) (Formerly: Open System International, Inc.):** Strategic technology partnership to implement and deploy an industry-leading Distributed Energy Resource Management System (DERMS). SMUD will receive royalties from future sales of the enhanced product suite for DERMS. DERMS Phase 1 and ADMS development is complete, implemented Q3 2022. DERMS Phase 2 development and building the QA DERMS test system is complete. DERMS Phase 3 design completed, continuing development of the core DERMS system functionality. SolarEdge and Virtual Peaker are continuing to integrate their systems into DERMS. DERMS Phase 2 and 3 are planned to go-live together September 2024.

OSI Inc. was bought by Emerson for \$1.6 billion in an all-cash transaction on October 1, 2020. The acquisition added to Emerson's existing \$1 billion standalone software and associated engineering implementation services portfolio. Then in May 2022, Emerson combined its industrial software businesses – OSI Inc. and its Geological Simulation Software business – with AspenTech to create a global industrial software leader. Shares of new AspenTech will began trading on NASDAQ under the ticker symbol "AZPN" in May 2022. The AspenTech partnership continues to contribute revenue to the portfolio.

- 2) **ESS Inc.:** ESS is a long duration energy storage system developer whose technology is based on earth-abundant iron, salt and water to deliver environmentally safe solutions capable of providing up to 12 hours of flexible energy capacity for commercial and utility-scale energy storage applications. Established in 2011, ESS Inc. enables project developers, independent power producers, utilities and other large energy users to deploy reliable, sustainable long-duration energy storage solutions.

SMUD and ESS established a joint collaboration agreement in 2022 to provide up to 200 megawatts (MW) / 2 gigawatt-hours (GWh) of ESS' environmentally safe and sustainable long duration energy storage solutions.

The agreement calls for ESS to deliver a mix of its Energy Warehouse™ and Energy Center™ long-duration energy storage (LDES) solutions for integration with the SMUD electric grid beginning in 2023. SMUD will deploy the LDES systems in support of its 2030 Zero Carbon Plan which aims to reduce thermal generation, maximize local solar generation, provide neighborhood resiliency, and increase social justice and equity. LDES is a key component in SMUD's decarbonization plan, without compromising reliability or low electricity rates.

As part of this multi-year agreement, ESS intends to set up facilities for battery system assembly, operations and maintenance support and project delivery in Sacramento, creating local, high paying jobs. In addition, SMUD and ESS plan to establish a Center of Excellence to expand the workforce and knowledge base for LDES technology in partnership with higher education institutions. The Center will provide advanced LDES technical training, creating a statewide skilled talent pool to help build and maintain

California's fast-growing long-duration energy storage resources. In 2023, SMUD installed and commissioned 6 Iron-flow LDES batteries as part of its partnership with ESS. The product installed was the Energy Warehouses by ESS. Each Energy Warehouse is packaged in a standard 40' shipping cargo container modified to house the electrolyte tanks, cell stack, and ancillary equipment such as pumps and electronics. The combined capacity of these units in total is 450 kW with energy storage capacity of about 3 MWh. In the future, when ESS has completed design of their Energy Center product with higher energy density, an additional 3.6 MW and 27 MWh are planned to be installed as part of this partnership.

- 3) **Swell Energy:** Swell is an aggregator of distributed energy storage technologies. Swell has partnered with SMUD to act as the aggregator for the My Energy Optimizer Partner+ program – a residential customer-driven virtual power plant initiative. The initial effort will bring 20 MWh and 10 MW of renewable capacity to SMUD by recruiting, installing and aggregating capacity from customers' battery storage systems located in SMUD's service area. The program has the opportunity to scale to 54 MWh and 27 MW over the term of the partnership. As of this writing, Swell Energy has filed for bankruptcy and SMUD is looking for a replacement partner.
- 4) **California Mobility Center (CMC):** The CMC is working to create a regional technology HUB that focuses on advancing mobility related technologies and the workforce needed to support them. The CMC works with many regional partners including SMUD to pursue mobility related grants, engage with technology companies interested in the Sacramento area, identify workforce needs to facilitate transformation of the mobility industry and provide community workforce development opportunities.

In 2023 the CMC launched workforce development curriculum focused on green careers and forklift operations. Curriculum development is also underway for EVSE service training programs and battery manufacturing training. As of this writing the CMC reported having trained over 350 individuals and helped place more than 30 individuals into new careers.

- 5) **GridX:** SMUD and GridX have partnered to pilot and demonstrate GridX technology. These pilots provide a mutual benefit for SMUD and GridX. SMUD customers benefit from GridX data analytics to help inform their energy decisions. Additionally, when these pilots support GridX to expand their services to additional clients some of that revenue is shared with SMUD to support long term affordability. The pilot work and partnership with GridX concluded in 2023.
- 6) **Simple Energy (Uplight):** Simple Energy has partnered with SMUD to operate the SMUD Energy Store. This partnership is a revenue sharing agreement that benefits directly from sales on the Energy Store site. SMUD Energy Store, available at [smudenergystore.com](http://smudenergystore.com), offers a variety of smart thermostats, connected home products, EV chargers, lighting products and water-saving products. Many items come with instant online rebates, significantly reducing the out-of-pocket prices of products such

as NEST learning thermostats and Phillips LED bulbs. Our partnership with Simple Energy (Uplight) has been highly collaborative, resulting in a strong and productive relationship. The health of our program is robust, with consistent progress and successful outcomes, thanks to our effective collaboration. This includes a 4% revenue share on Gross Merchandise Value, Second Nature Air Filter partner revenue share, and City of Sacramento water rebates program administration

Several new product additions were added in 2023, including an expanded EV charger, smart thermostat, smart home, lighting and water savings product offerings. Other offerings include home weatherization kits and air purifiers. We added the CleanPower City Champion 'Join the Pledge' to the store and checkout flow as well as an integrated bundled EV charger purchase + Qmerit installation experience. We enhanced segmented rebate functionality to offer increased instant rebates to validated EAPR customers, participated in Customer Resource Expo to educate customer about the SMUD Energy Store and implemented Spanish customer support + Spanish contact/FAQ. Lastly, we enhanced automation of My Energy Optimizer eligibility check and updated our marketing review process in collaboration with the vendor.

- 7) **Smart Energy Systems, Inc. dba Smart Energy Water (SEW):** SEW is a digital platform developer dedicated to solving global energy and water crises. SMUD and SEW are Co-developing innovative utility centric communication tools such as, customer facing self-service modules, payment processing, prepay, eMobility, and advanced analytics for grid resilience. These tools support SMUD in our zero-carbon journey and may generate future shared revenue if the tools are adopted by other utilities. In 2023, SMUD collaborated with SEW to complete the development of a Minimum Viable Product (MVP) for SEW's Smart Customer Mobile Platform which included it's Enterprise (commercial) persona. This platform standup set the foundation for SEW and SMUD to co-develop innovative utility centric communication tools such as, customer facing self-service modules, payment processing, prepay, eMobility, and advanced analytics for grid resilience. These tools support SMUD in our zero-carbon journey and may generate future shared revenue or platform licensing offsets if the tools are adopted by other utilities. As we are standing up the SEW platform, revenue or licensing offsets have not yet materialized. In 2024, efforts are underway for a more solidified revenue share addendum to the SMUD and SEW Joint Collaboration Agreement (JCA).





SSS No. LEG 2024-0125

# BOARD AGENDA ITEM

## STAFFING SUMMARY SHEET

Committee Meeting & Date Policy – 10/09/24
Board Meeting Date October 17, 2024

TO	TO
1. Scott Martin	6.
2. Farres Everly	7.
3. Brandy Bolden	8.
4. Suresh Kotha	9. <b>Legal</b>
5.	10. <b>CEO &amp; General Manager</b>

<b>Consent Calendar</b>	<input checked="" type="checkbox"/>	<b>Yes</b>		<b>No</b> <i>If no, schedule a dry run presentation.</i>	<b>Budgeted</b>		<b>Yes</b>	<input checked="" type="checkbox"/>	<b>No</b> <i>(If no, explain in Cost/Budgeted section.)</i>		
FROM (IPR)				DEPARTMENT					MAIL STOP	EXT.	DATE SENT
Laura Lewis				Executive Office					B308	6123	09/24/24

**NARRATIVE:**

**Requested Action:** Discuss, with possible amendment, proposed revisions to **Governance Process GP-15, Board Travel and Training Reimbursement.**

**Summary:** Pursuant to Governance Process GP-15, Board Travel and Training Reimbursement (GP-15), the budget for Board member travel and training is annually adjusted for inflation using the publicly available Travel Price Index (TPI). In recent months, access to certain of the TPI information now requires an annual subscription that is quite costly. Staff recommends a revision to the policy language to reflect that the budget will be annually adjusted for inflation but allows for the flexibility to use other reliable data to process the increase in the event the TPI data typically used is unavailable at the time needed due to the subscription model. Although TPI data is publicly posted, the schedule for which it is made available is inconsistent and unpredictable. Proposed revisions are attached in “redline” and “clean” format.

**Board Policy:** *(Number & Title)* Governance Process GP-1, Purpose of Board – Subsection a) Identify and define the purpose, values and vision of SMUD and communicate them in the form of policy.

**Benefits:** Enables the Board to review the policy with the opportunity to make corrections, additions, or changes if necessary.

**Cost/Budgeted:** N/A

**Alternatives:** Maintain the existing policy; approve different revisions; table discussion for another date.

**Affected Parties:** Board of Directors

**Coordination:** Board Office, Executive Office, Finance & Strategy, and Legal

**Presenter:** Jennifer Restivo, Director, Planning & Revenue Strategy

**Additional Links:**

SUBJECT <b>Proposed Revisions to Governance Process GP-15, Board Travel and Training Reimbursement</b>	ITEM NO. <i>(FOR LEGAL USE ONLY)</i>
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

# SMUD BOARD POLICY



**Category:** Governance Process  
**Policy No.:** GP-15  
**Title:** Board Travel and Training Reimbursement

Board members shall have the opportunity to attend conferences, meetings, training, and various activities that are appropriate to their work as Directors and provide value to SMUD.

As part of this policy:

- a) Each Board member shall have an annual budget for travel and training, which shall be adjusted annually for inflation ~~based on the Travel Price Index (July-June)~~ and rounded to the nearest hundred dollars. The training budget shall include funds for attendance at community functions and baseline dues in organizations that further Board members' professional development, when accompanied by written justification.
- b) The Board shall approve its travel and training budget as part of the annual budget process. Budgeted travel and training funds shall expire at the end of each calendar year with no rollover option.
- c) The Board travel and training budget shall be managed by the Special Assistant to the Board as part of the Board Office budget.
- d) Requests for travel, training and events in excess of \$1,000 shall be accompanied by a written justification of the benefits to SMUD and consistency with Board policy and submitted to the Board Special Assistant.
- e) Written travel and training justifications required by sections a) and d) of this policy, along with a status report on the Board's travel and training budget and individual directors' expenditures, shall be distributed to all Board members monthly for the purposes of transparency and oversight.
- f) Board members shall submit all relevant travel and training receipts to Board Office staff within two weeks for reconciliation.
- g) Board members shall publicly report the results of their travel and training at a Board meeting.
- h) New Board members shall receive an orientation in the Board's travel and training policy.

**Monitoring Method:** Board Report

**Frequency:** Annual

**Versioning:**

November 13, 2008	Resolution No. 08-11-07	Date of Adoption. (Effective Date = January 1, 2009)
August 20, 2009	Resolution No. 09-08-15	Date of Revision.
October 6, 2011	Resolution No. 11-10-02	Date of Revision.
December 1, 2016	Resolution No. 16-12-03	Date of Revision.
September 21, 2023	Resolution No. 23-09-02	Date of Revision.
February 15, 2024	Resolution No. 24-02-04	Date of Revision.
June 20, 2024	Resolution No. 24-06-08	Date of Revision. <del>[Current Policy]</del>
<u>October 17, 2024</u>	<u>Resolution No. 24-10-##</u>	<u>Date of Revision. [Current Policy]</u>

# SMUD BOARD POLICY



**Category:** Governance Process  
**Policy No.:** GP-15  
**Title:** Board Travel and Training Reimbursement

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**Monitoring Method:** Board Report

**Frequency:** Annual

**Versioning:**

November 13, 2008	Resolution No. 08-11-07	Date of Adoption. (Effective Date = January 1, 2009)
August 20, 2009	Resolution No. 09-08-15	Date of Revision.
October 6, 2011	Resolution No. 11-10-02	Date of Revision.
December 1, 2016	Resolution No. 16-12-03	Date of Revision.
September 21, 2023	Resolution No. 23-09-02	Date of Revision.
February 15, 2024	Resolution No. 24-02-04	Date of Revision.
June 20, 2024	Resolution No. 24-06-08	Date of Revision.
October 17, 2024	Resolution No. 24-10-##	Date of Revision. [Current Policy]



SSS No. BOD 2024-017
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# BOARD AGENDA ITEM

## STAFFING SUMMARY SHEET

Committee Meeting & Date Policy – October 9, 2024
Board Meeting Date N/A

TO	TO
1. Scott Martin	6.
2. Suresh Kotha	7.
3. Brandy Bolden	8.
4. Farres Everly	9. <b>Legal</b>
5.	10. <b>CEO &amp; General Manager</b>

<b>Consent Calendar</b>		<b>Yes</b>	<input checked="" type="checkbox"/>	<b>No</b> <i>If no, schedule a dry run presentation.</i>	<b>Budgeted</b>	<input checked="" type="checkbox"/>	<b>Yes</b>	<b>No</b> <i>(If no, explain in Cost/Budgeted section.)</i>
FROM (IPR) Dave Tamayo / Crystal Henderson	DEPARTMENT Board Office			MAIL STOP B304	EXT. 5424	DATE SENT 9/10/24		

**NARRATIVE:**

**Requested Action:** Allow the Board of Directors an opportunity to monitor existing policies: Governance Process GP-8, Board Committee Principles; Governance Process GP-10, Board Training, Orientation; Governance Process GP-12, Board Compensation and Benefits; Governance Process GP-15, Board Travel and Training Reimbursement.

**Summary:** A schedule to monitor Board policies was agreed upon by the Policy Monitoring Ad Hoc Committee. Monitoring established policies creates a better understanding of the policies and gives the Board an opportunity to make corrections, additions, or changes, if necessary.

**Board Policy:** *(Number & Title)* This monitoring supports GP-2 Governance Focus which states that the Board will direct, evaluate, and inspire the organization through the establishment of written policies which reflect the Board’s values.

**Benefits:** Monitoring policies helps ensure the policies are current and in keeping with the current will of the Board.

**Cost/Budgeted:** Included in budget

**Alternatives:** Not review these policies at this time.

**Affected Parties:** Board of Directors

**Coordination:** Special Assistant to the Board, Board Office

**Presenter:** Dave Tamayo, Policy Chair

**Additional Links:**

SUBJECT Board Monitoring of GP-8, GP-10, GP-12, and GP-15	ITEM NO. <i>(FOR LEGAL USE ONLY)</i>
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

# SMUD BOARD POLICY



**Category:** Governance Process  
**Policy No.:** GP-8  
**Title:** Board Committee Principles

The Board may establish standing committees and the president may establish ad hoc committees based on need and input from the Board members.

Standing committees shall assist the Board in its ongoing work and activities. Standing committees shall be composed of three Board members, including a chair and vice-chair, who shall be appointed by the Board President. Any other Board member may attend and participate in the deliberations of any standing committee. Each standing committee shall have a charter describing the committee's purpose. If a standing committee lacks a quorum of members for any meeting, the President, Vice-President, or Committee chair, in that order, may appoint a non-committee Board member to serve on the Committee for that meeting.

Ad hoc committees shall be created for a limited duration to address a specific topic of interest to the Board. Each ad hoc committee may be composed of two or three Board members, and shall include designation of a chair and a clear statement of purpose. Ad hoc committees are not required to provide public notice of their meetings under the Ralph M. Brown Act. Each ad hoc committee shall report back at a publicly noticed Board or standing committee meeting on its activities.

Specifically:

- a) All committees will ordinarily assist the Board by gaining education, considering alternatives and implications, and preparing policy alternatives.
- b) Board committees may not speak or act for the Board except when formally given such authority for specific and time-limited purposes.
- c) Board committees cannot exercise authority over staff nor interfere with the delegation from the Board to the CEO. Because the CEO works for the full Board, he or she will not be required to obtain approval of a Board committee before an executive action.
- d) As a general rule, items scheduled for Board action (including items requested by a Board member) shall first be presented to a standing committee for review.
- e) Standing committees shall be reviewed at least annually by the Board to determine whether they should continue.

- f) This policy applies to any group which is formed by Board action, whether or not it is called a committee and regardless of whether the group includes Board members. It does not apply to committees formed under the authority of the CEO.

**Monitoring Method: Board Report**

**Frequency: Annual**

**Versioning:**

December 19, 2002	Resolution No. 02-12-14	Date of Adoption.
October 16, 2003	Resolution No. 03-10-14	Date of Revision.
June 3, 2004	Resolution No. 04-06-07	Date of Revision.
January 12, 2006	Resolution No. 06-01-05	Date of Revision.
January 24, 2008	Resolution No. 08-01-07	Date of Revision.
March 20, 2008	Resolution No. 08-03-08	Date of Revision.
September 17, 2009	Resolution No. 09-09-10	Date of Revision. (Effective Date = January 1, 2010)
September 21, 2023	Resolution No. 23-09-02	Date of Revision. [Current Policy]

# SMUD BOARD POLICY



**Category:** Governance Process  
**Policy No.:** GP-10  
**Title:** Board Training, Orientation

The Board will invest in training, development and orientation to assure excellence in governance.

Specifically:

- a) Board members shall be offered and encouraged to receive training in the skills of effective governance, communication and decision making.
- b) The Board president and Board committee chairs shall be offered and encouraged to receive training in the facilitation of meetings.
- c) At least every two years, Board members shall receive training on sexual harassment prevention and laws related to ethics (conflict of interest requirements, government transparency, open and fair government processes). Training shall be made available annually.
- d) New Board members shall receive an orientation in the SMUD's governance policies.
- e) Board members shall be offered and encouraged to receive regular training with respect to understanding trends and developments in public power and the energy industry.

**Monitoring Method:** Board Report

**Frequency:** Annual

**Versioning:**

December 19, 2002	Resolution No. 02-12-14	Date of Adoption.
October 16, 2003	Resolution No. 03-10-14	Date of Revision.
December 1, 2005	Resolution No. 05-12-09	Date of Revision.
April 6, 2006	Resolution No. 06-04-07	Date of Revision.
April 19, 2007	Resolution No. 07-04-13	Date of Revision.
April 17, 2008	Resolution No. 08-04-10	Date of Revision.
August 20, 2009	Resolution No. 09-08-14	Date of Revision.
July 18, 2013	Resolution No. 13-07-03	Date of Revision.
March 17, 2016	Resolution No. 16-03-10	Date of Revision.
September 21, 2023	Resolution No. 23-09-02	Date of Revision. [Current Policy]



# SMUD BOARD POLICY



**Category:** Governance Process  
**Policy No.:** GP-12  
**Title:** Board Compensation and Benefits

In keeping with the MUD Act, members of the Board of Directors are entitled to compensation for their service. Specifically:

- 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) Board member compensation shall be reviewed annually.
- c) 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.
- d) 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.
- e) Compensation forms shall be completed by a Director and distributed to the Board office. The Board shall review and approve compensation and any request for technology reimbursement at a 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.
- f) 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.

- g) 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**

**Versioning:**

December 19, 2002	Resolution No. 02-12-14	Date of Adoption.
October 16, 2003	Resolution No. 03-10-14	Date of Revision.
December 2, 2004	Resolution No. 04-12-03	Date of Revision.
December 1, 2005	Resolution No. 05-12-10	Date of Revision.
May 17, 2007	Resolution No. 07-05-08	Date of Revision.
July 16, 2009	Resolution No. 09-07-02	Date of Revision.
September 18, 2014	Resolution No. 14-09-07	Date of Revision.
December 20, 2018	Resolution No. 18-12-15	Date of Revision.
December 12, 2019	Resolution No. 19-12-05	Date of Revision.
June 15, 2023	Resolution No. 23-06-02	Date of Revision. (Effective Date = July 1, 2023)
September 21, 2023	Resolution No. 23-09-02	Date of Revision.
February 15, 2024	Resolution No. 24-02-03	Date of Revision. [Current Policy]

# SMUD BOARD POLICY



**Category:** Governance Process  
**Policy No.:** GP-15  
**Title:** Board Travel and Training Reimbursement

Board members shall have the opportunity to attend conferences, meetings, training, and various activities that are appropriate to their work as Directors and provide value to SMUD.

As part of this policy:

- a) Each Board member shall have an annual budget for travel and training, which shall be adjusted annually for inflation based on the Travel Price Index (July-June) and rounded to the nearest hundred dollars. The training budget shall include funds for attendance at community functions and baseline dues in organizations that further Board members' professional development, when accompanied by written justification.
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- c) The Board travel and training budget shall be managed by the Special Assistant to the Board as part of the Board Office budget.
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- e) Written travel and training justifications required by sections a) and d) of this policy, along with a status report on the Board's travel and training budget and individual directors' expenditures, shall be distributed to all Board members monthly for the purposes of transparency and oversight.
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- g) Board members shall publicly report the results of their travel and training at a Board meeting.
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**Monitoring Method:** Board Report

**Frequency:** Annual

**Versioning:**

November 13, 2008	Resolution No. 08-11-07	Date of Adoption. (Effective Date = January 1, 2009)
August 20, 2009	Resolution No. 09-08-15	Date of Revision.
October 6, 2011	Resolution No. 11-10-02	Date of Revision.
December 1, 2016	Resolution No. 16-12-03	Date of Revision.
September 21, 2023	Resolution No. 23-09-02	Date of Revision.
February 15, 2024	Resolution No. 24-02-04	Date of Revision.
June 20, 2024	Resolution No. 24-06-08	Date of Revision. [Current Policy]



SSS No. BOD 2024-05
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# BOARD AGENDA ITEM

## STAFFING SUMMARY SHEET

Committee Meeting & Date POLICY – October 9, 2024
Board Meeting Date N/A

TO				TO							
1.	Suresh Kotha	6.									
2.	Brandy Bolden	7.									
3.	Farres Everly	8.									
4.		9.	<b>Legal</b>								
5.		10.	<b>CEO &amp; General Manager</b>								
<b>Consent Calendar</b>		<b>Yes</b>	<input checked="" type="checkbox"/>	<b>No</b> <i>If no, schedule a dry run presentation.</i>		<b>Budgeted</b>	<input checked="" type="checkbox"/>	<b>Yes</b>	<b>No</b> <i>(If no, explain in Cost/Budgeted section.)</i>		
FROM (IPR) Rosanna Herber / Crystal Henderson				DEPARTMENT Board Office				MAIL STOP B307	EXT. 5424	DATE SENT 12/21/23	

**NARRATIVE:**

**Requested Action:** Enable the Board of Directors and Executive Staff an opportunity to review the Board Work Plan.

**Summary:** The Board President reviews the Board Work Plan at the Policy Committee meeting to ensure agenda items support the work of the Board.

**Board Policy:** *(Number & Title)* This review of the work plan supports Governance Process GP-6, Role of the Board President, which states, in part, that the Board President “shall ensure that the Board’s agendas meet the goals of the annual work plan.”

**Benefits:** Reviewing the Work Plan allows the Board members and Executive staff to make changes to the Work Plan and Parking Lot items as necessary.

**Cost/Budgeted:** Included in budget

**Alternatives:** Not review the Work Plan at this time.

**Affected Parties:** Board of Directors and Executive staff

**Coordination:** Crystal Henderson, Special Assistant to the Board

**Presenter:** Rosanna Herber, Board President

**Additional Links:**

SUBJECT <b>Board Work Plan</b>	ITEM NO. <i>(FOR LEGAL USE ONLY)</i>
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.





SSS No. BOD 2024-03
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# BOARD AGENDA ITEM

## STAFFING SUMMARY SHEET

Committee Meeting & Date POLICY - October 9, 2024
Board Meeting Date N/A

TO				TO			
1.	Suresh Kotha	6.					
2.	Brandy Bolden	7.					
3.	Farres Everly	8.					
4.		9.	<b>Legal</b>				
5.		10.	<b>CEO &amp; General Manager</b>				
<b>Consent Calendar</b>		<b>Yes</b>	<input type="checkbox"/>	<b>No</b>	<i>If no, schedule a dry run presentation.</i>		
FROM (IPR)		<b>Budgeted</b>		<input type="checkbox"/>	<b>Yes</b>	<b>No</b> <i>(If no, explain in Cost/Budgeted section.)</i>	
Dave Tamayo / Crystal Henderson		DEPARTMENT		MAIL STOP	EXT.	DATE SENT	
		Board Office		B304	5424	12/21/23	

**NARRATIVE:**

**Requested Action:** A summary of directives is provided to staff during the committee meeting.

**Summary:** The Board requested an ongoing opportunity to do a wrap up period at the end of each committee meeting to summarize various Board member suggestions and requests that were made at the meeting to make clear the will of the Board. The Policy Committee Chair will summarize Board member requests that come out of the committee presentations for this meeting.

**Board Policy:** *(Number & Title)* Governance Process GP-4, Board/Committee Work Plan and Agenda Planning, states, among other things, “the Board will develop and follow an annual work plan that ensures the Board...focuses on the results the Board wants the organization to achieve....”

**Benefits:** Having an agendized opportunity to summarize the Board’s requests and suggestions that arise during the committee meeting will help clarify the will of the Board.

**Cost/Budgeted:** Included in budget.

**Alternatives:** Not to summarize the Board’s requests at this meeting.

**Affected Parties:** Board of Directors and Executive Staff

**Coordination:** Crystal Henderson, Special Assistant to the Board of Directors

**Presenter:** Dave Tamayo, Policy Chair

**Additional Links:**

SUBJECT	<b>Summary of Committee Direction - Policy</b>	ITEM NO. <i>(FOR LEGAL USE ONLY)</i>
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.