Board Policy Committee Meeting and Special SMUD Board of Directors Meeting

Date: Wednesday, November 13, 2024

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

Location: SMUD Headquarters Building, Auditorium

6201 S Street, Sacramento, CA

Powering forward. Together.

SMUD®

AGENDA
BOARD POLICY COMMITTEE MEETING
AND SPECIAL SMUD BOARD OF DIRECTORS MEETING

Wednesday, November 13, 2024
SMUD Headquarters Building, Auditorium
6201 S Street, Sacramento, California
Scheduled to begin at 6:00 p.m.

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

Zoom Webinar Link: Join Board Policy Committee Meeting Here
Webinar/Meeting ID: 161 791 5692
Passcode: 452350
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 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.   Jillian Rich   Discuss the monitoring report for **Strategic Direction SD-17, Enterprise Risk Management**.
Presentation: 15 minutes
Discussion: 10 minutes

2.   Dave Tamayo   Annual Review of Standing Committees.
Presentation: 5 minutes
Discussion: 5 minutes

3.   Rosanna Herber   Discuss **Election of Officers for 2025** (President and Vice President) for the SMUD Board of Directors.
Discussion: 5 minutes

INFORMATIONAL ITEMS

4.   Rosanna Herber   Board Work Plan.
Discussion: 5 minutes

5.   Public Comment

6.   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 website or may call 1-916-732-7143 to arrange for inspection of the documents at the SMUD Headquarters Building, 6201 S Street, Sacramento, California.

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

SSS No. CFO 24-010	**BOARD AGENDA ITEM** **STAFFING SUMMARY SHEET**	Committee Meeting & Date Policy Committee November 13, 2024
		Board Meeting Date November 21, 2024

	TO			TO
1.	Scott Martin	6.		
2.	Suresh Kotha	7.		
3.	Brandy Bolden	8.		
4.	Farres Everly	9.	**Legal**	
5.		10.	**CEO & General Manager**	

Consent Calendar		**Yes**		**No** *If no, schedule a dry run presentation.*	**Budgeted**	**Yes**		**No** *(If no, explain in Cost/Budgeted section.)*

FROM (IPR) Melissa Azevedo	DEPARTMENT Enterprise Strategy and Risk	MAIL STOP B205	EXT. 6508	DATE SENT 10/13/2024

NARRATIVE:

Requested Action: Accept the monitoring report for Strategic Direction SD-17, Enterprise Risk Management.

Summary: The Enterprise Risk Management Report summarizes activities that have occurred since the November 2023 annual report. The report includes historical risk profiles of enterprise risk focus areas for 2023-2024, mitigation strategies, and a current residual risk exposure status of identified enterprise risks.

Board Policy: Strategic Direction SD-17, Enterprise Risk Management.
(Number & Title)

Benefits: Provides Board members information regarding SMUD's Enterprise Risk.

Cost/Budgeted: N/A

Alternatives: Provide a written report to the Board.

Affected Parties: Board of Directors, Customers, Employees, SMUD Operations

Coordination: Enterprise Risk Management activities are closely coordinated enterprise-wide throughout SMUD.

Presenter: Jillian Rich, Manager, Enterprise Strategy & Risk

Additional Links:

SUBJECT	SD-17, Enterprise Risk Management Board Monitoring Report	ITEM NO. *(FOR LEGAL USE ONLY)*

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors   **DATE:** October 29, 2024

FROM: Claire Rogers *CR 10/29/24*

SUBJECT: Audit Report No. 28007756
Board Monitoring Report; SD-17: Enterprise Risk Management

Internal Audit Services (IAS) received the SD-17 *Enterprise Risk Management* 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

DRAFT

Board Monitoring Report 2024
SD-17, Enterprise Risk Management

1. Background

Strategic Direction 17 states that:
Effectively balancing and managing risk to further SMUD's policies and business goals is a core value of SMUD.

Therefore:
SMUD will implement and maintain an integrated enterprise risk management process that identifies, assesses, prudently manages, and mitigates a variety of risks facing SMUD, including financial, supply, operational, physical and cyber security, climate change, legal, legislative and regulatory, and reputational risk.

2. Executive summary

SMUD is in compliance with SD-17 Enterprise Risk Management. SMUD strategically manages risk to proactively reduce the chance of loss and take advantage of opportunities that support SMUD's mission. In addition, as presented to the Policy Committee in June 2024, SMUD is maturing its risk management framework and reporting structure, the results of which will be presented to the Board in 2025 through Policy Committee updates ahead of the next Annual Monitoring Report.

In preparation for the 2024 Annual Monitoring Report, staff interviewed and surveyed management to determine current risk levels. Enterprise risks are assessed by impact, likelihood and velocity to determine residual risk, or the risk remaining after mitigations and internal controls have been implemented.

Overall, SMUD's residual risk exposure has remained steady at medium/high. In many cases, the probability or potential impact of an adverse event increased, but SMUD leveraged its risk framework successfully to introduce new controls or mitigations that allowed the residual risk level to stay the same.

Summarized below is the current Residual Risk Exposure over a three-year period.

			Nov. 2022	Nov. 2023	Nov 2024
✓	**"Red":**	Extremely High Residual Exposure	0	0	0
✓	**"Orange":**	High Residual Exposure	6	5	5
✓	**"Yellow":**	Medium Residual Exposure	39	40	41
✓	**"Green":**	Low Residual Exposure	38	40	39
✓	**"Blue":**	Extremely Low Residual Exposure	0	0	0
			83	**85**	**85**

Although the counts remain the same from 2023 to 2024, we had two changes to risk levels:
- Business agility – Changed from "Yellow" or medium to "Green" or low
- Demand response – Changed from "Green" or low to "Yellow" or medium

- Employee Safety was incorrectly categorized as "Green" or low in 2023 SD-17 Monitoring Report and has been corrected to "Yellow" or medium in 2024.

Staff continues to implement risk mitigation strategies to balance residual risk exposures. There are currently 46 risks, shown in the last two lines of the table, which are within the risk management goal.

Current Residual Risk Exposure	Risk Management Goal	Number of Risks
Orange "high"	Yellow "medium"	5
Yellow "medium"	Green "low"	34
Yellow "medium"	Yellow "medium"	7
Green "low"	Green "low"	39

Changes to SMUD's risk landscape this year include increased cyber events, physical security concerns, disruptive technology, global and political unrest, supply chain shortages, and continued unprecedented weather events. SMUD is focused on building resiliency measures into our enterprise risk management practices to be better able to monitor and respond to hazards or uncertainties and adapt to a rapidly changing risk landscape.

3. Additional Supporting Information

A. 2024 Risk Management Highlights

In 2024, ERM continued to:
- support the organization by facilitating risk conversations, supporting special projects, and providing a uniform risk framework
- enhance cross-functional discussion and thorough understanding of major risk issues by leveraging five committees, including the Enterprise Risk Oversight Committee (EROC), Risk Champions Network (RCN), Trading Operations Risk Committee (TORC), Zero Carbon Plan Steering Committee, and the Three Lines Working Team

In terms of new efforts, ERM began a refresh of its risk framework to better anticipate and accommodate our changing risk landscape. Internal Audit Services and KPMG, a global consulting firm, completed a maturity assessment of SMUD's Enterprise Risk Management program in April 2024 to identify potential areas for improvement. Results from the maturity assessment were presented to the Policy Committee in June 2024. SMUD incorporated several changes into how we manage enterprise risk in support of their recommendations. To that end, SMUD:

- realigned the Enterprise Risk Management function with Strategy to create the new Enterprise Strategy & Risk team under the Chief Financial Officer
- hired and onboarded a new Enterprise Risk Program Manager
- aligned and coordinated commodity risk reporting with overall enterprise risk reporting on a quarterly basis
- continued to support decision-making during the enterprise prioritization, planning and budget process.
- Created a plan for further ERM enhancements and implementation of KPMG recommendations in 2025

In addition, SMUD completed several efforts in 2024 to reduce the impact of risk in the areas of reliability, safety and supply chain. Highlights of those efforts are provided below.

Contractor Code of Conduct

In 2024, staff implemented a new Contractor Code of Conduct to help mitigate supply chain risk and continue providing a safe, reliable and sustainable grid for the future. The Code of Conduct outlines how staff will recruit contractors – and their employees and subcontractors – who share SMUD's vision. With their collaboration, SMUD is aiming to create a supply chain that collectively contributes to building a greener, more sustainable future. The Code of Conduct outlines specific guidelines that ensures compliance with; laws, rules and regulations, labor and human rights, environmental and social, health and safety, diversity, equity, inclusion and belonging, and ethics and compliance.

CrowdStrike Response

In July 2024, SMUD was one of many entities affected by a worldwide CrowdStrike information technology (IT) outage, which impacted Microsoft Windows applications. Staff acted promptly to alert support teams and communicate the cause and the solution. IT teams moved swiftly, prioritizing our most important systems and working through the night to bring systems back online. Due to our internal teams' hard work and dedication, systems were back online quickly, and we were fully recovered in a matter of days, without having to pay for external recovery specialist services. The incident demonstrated the successful operation of our controls around business continuity, which is an Enterprise Risk.

Storm Response Team

For a second year in a row, extreme weather interrupted power to thousands of SMUD customers as strong wind gusts persisted for several hours in February 2024. However, preparations completed over the prior year significantly improved our speed of restoration and accuracy of estimated restoration times. SMUD was able to provide customers with new status information, letting them know when crews were scheduled to restore their power and when crews arrived on site. More staff was placed in the field by leveraging pre-existing contracts, training meter and substation staff to respond to damage reports and calling on retired annuitants. We used new technologies and processes to synthesize the data coming back to rapidly build a restoration schedule and were able to track and beat the schedule over the recovery period. This storm provided a first test of the improvements we implemented last year and showed significant impact to our customers' experiences. We will continue to build on these successes and iteratively enhance the processes for next year.

Supply Chain Enhancements

Several enhancements were completed in 2024 to reduce the impact of supply chain shortages on SMUD's operations. Staff held regular recurring business review and demand planning meetings across several operational areas primarily focused on construction, material, and equipment contractors. Staff also implemented two multi-million bulk purchasing efforts, the first to bring on additional substation resources at 200 million and the second to decrease the cost and lead times of transformers at 250 million.

Insurance Recovery

To mitigate the financial impact of business disruption risks such as asset outages, SMUD has commercial insurance policies. In 2024, SMUD completed collections on two large insurance claims. We received final settlement of the Consumnes Power Plant (CPP) business interruption claim resulting in recovery of an additional $88.9 million in 2024, for a total claim recovery of $152 million (equipment loss and business interruption). This year SMUD also finished collecting the $7.5 million insurance payout for the Station A fire in 2021. These funds offset prior costs and will support lower rate increases going forward.

B. Benchmarking

North Carolina State University's (NCSU) Enterprise Risk Management Initiative and Protiviti continue to jointly publish benchmark information. The joint study, <u>2024 & 2034 Executive Perspectives on Top Risks,</u> provides insight for short-term and long-term risks from 1,443 global board members and executives from across several industries.

Overall, the study found that risks are becoming increasingly interrelated and pose significant challenges to current business models and the ability of modern organizations to be resilient and agile. As the risks associated with the pandemic subside, concerns around several emerging risks and uncertainty in the world is causing risk exposure to rise. Today's executive concerns continue to be focused on cybersecurity, third-party, talent and workforce management, and political and economic uncertainty, but the emerging risks associated with disruptive technologies, climate change, and regulatory changes are changing how risk is managed. Specific to the energy and utility industry, executives are most focused on the operational risks around cybersecurity, supply chain and weather-related risks, but found that their organizations were becoming more adaptable and better able to respond to events. In addition to operational concerns, the risks associated with regulatory and legislative changes ranked high for energy and utility leaders. Attachment B compares SMUD's top enterprise risks to the top 10 Energy and Utility risks identified in NCSU and Protiviti study.

C. Risk Focus Areas & Global Risk Trends

As described in last year's SD-17 Annual Report, SMUD leaders selected 16 risk focus areas in 2023. Risk focus areas have a high potential to impact the achievement of SMUD's goals and strategic objectives in the upcoming year and are therefore areas of emphasis for our risk committees and investment decisions. This year, SMUD added two risks, Changing Customer Expectations and Grid Infrastructure and Operational Adequacy, for a total of 18 risk focus areas.

Attachment A outlines each risk focus area and the actions that have been taken to address these risks. Provided below is a synopsis of increasing global risk since the 2023 Board update that may cause risk focus areas to trend upward. These changes are also examples of the type of information tracked and reported by SMUD's risk management functions.

Global risk trends impacting SMUD's 2023-2024 risk focus areas:

- ***Political and Regulatory Uncertainty:*** There are potential effects of the upcoming November elections on the energy industry, specifically related to grant funding and regulation changes. Moreover, at the State level there are ever-evolving regulations as California manages the energy transition. This creates a level of uncertainty that deserves attention. Reliably delivering zero carbon power in an increasingly interconnected energy landscape will require coordination and collaboration between federal and state policy makers, regulators, owners, and operators.
- ***Climate Change and Severe Weather:*** Climate change continues to pose some of the biggest areas of uncertainty. Four characteristics make it especially impactful amongst other risks. That is its global nature, its long-term consequences, the fact that it is potentially irreversible, and the almost overwhelming uncertainty surrounding its progression and effects.
- ***Third-Party and Supply Chain Risk:*** Uncertainty around supply chain issues in the energy and utility industry has diminished since its peak during the pandemic. However, concerns remain high given how the energy industry's value chain is highly service, feedstock, parts, and equipment oriented. Disruptions related to global events such as

geopolitical tensions or labor strikes at the Ports threaten to inhibit a utility's ability to secure the equipment needed to maintain existing and build new infrastructure. Additionally, there is risk in testing new business models working with untested partners as the grid is modernized.

- *Physical and Cybersecurity Threats:* An increasingly modernized grid creates a larger physical and digital footprint, which in turn elevates exposure to physical and cybersecurity threats. On a national scale, there are an increasing number of reports of both physical and cybersecurity attacks against utilities from domestic terrorists. Lastly, while the recent acceleration of artificial intelligence provides prospective benefits, it also likely adds another dimension for use by bad actors.
- *Changing Customer Expectations:* Customer preferences are changing at a faster rate than they have in the past due to the prevalence of social media and more granular segmentation data. Additionally, customers continue to be impacted by the inflationary pressures introduced during the pandemic, which can increase energy bill burden, especially for certain communities. Lastly, as technological advances continue to accelerate, organizations are under more and more pressure to meet customers' evolving needs.

Staff reviews available enterprise risk-related information, including global risk trends such as those above, and incorporates new risk issues and/or expands existing risk issues where appropriate.

D. Looking forward

In 2025, ERM will work with leaders to refresh the enterprise risk management framework. The refreshed framework will include improvements in standardization, prioritization, aggregation and interconnectedness of risks as recommended by KPMG. Included in the refreshed framework will also be a discussion of emerging risks impacting the organization.

4. Challenges

Today's risk environment is increasingly becoming more complex, interconnected and crisis-driven. How we manage risk will need to evolve in response. As we refresh the enterprise risk management framework, we will be challenged to look holistically across the organization to identify and mitigate risk cross-functionally. Moving to an approach that identifies and manages risk both from a top-down and bottom-up perspective will improve risk governance across the enterprise, our ability to identify and manage emerging risks, and provide management with improved quantitative tools to make resource decisions.

5. Recommendation

It is recommended that the Board accept the Monitoring Report for SD-17, Enterprise Risk Management.

6. Appendix

2023-2024 Risk Focus Areas

Risk Category	Risk	Year on Year Changes			Risk Trend	Target	Risk Mitigation Activity
		2022	2023	2024			
Operational: Process	Business continuity and disaster recovery	🟡	🟡	🟡	⬇	🟢	In 2024 staff completed several mitigations to improve SMUD's ability to respond to business disruptions including: • implementing a new Business Continuity Management (BCM) Solution, • transitioning 100% of Business Impact Analysis (BIAs) from Excel into the new BCM, and • and initiated a process to validate and catalog all technology applications. SMUD's continuity plans and disaster recovery capabilities were tested this past year with the CrowdStrike event and controls are functioning as currently designed. Staff anticipate this risk decreasing in 2025 due to completion of the Enterprise Continuity Management (ECM) roll-out.
Financial	Commodity costs: energy commodity	🟡	🟡	🟡	➡	🟡	The Trading Oversight Risk Committee (TORC) continues to monitor changes and report to the Enterprise Risk Oversight Committee (EROC) as appropriate. One highlight of the year is the Northern California Energy Authority (NCEA) Commodity Prepay Restructuring, which will save SMUD an average of $5.6M a year for six years. Another highlight is our recent modification to a power procurement directive, which used a data-driven approach to help reduce cost exposure while still protecting SMUD from market and supply fluctuations.
Operational: Process	Control center	🟠	🟡	🟡	➡	🟢	Efforts to replace the Primary Control Center continue. Staff completed land acquisition and pre-construction planning and procurement and anticipate completing California Environmental Quality Act (CEQA) documentation in the near future. Design and site work are set to begin in 2025.

2023-2024 Risk Focus Areas

Risk Category	Risk	Year on Year Changes			Risk Trend	Target	Risk Mitigation Activity
		2022	2023	2024			
Strategic	Changing customer expectations	🟡	🟡	🟡	⬆	🟢	SMUD continued to deliver on the needs of our customers in 2024, focusing on customer relations, outreach, education, customer technology enhancements and awareness to achieve a carbon-free future by 2030 that our customers can equitably participate in. There were several notable customer-facing accomplishments: • Proactively enrolled all residential customers (over 330,000) with an SMS-capable phone number in outage text alerts. • Expanded outage reporting to two-way text, making it easier than ever for customers to report their power outage. • Launched new features in My Energy Tools, including new 'Bill Compare' and 'Bill Forecast' tools. Expanded Residential Energy Management program, including many new enrollments in 2024. • Launched new contact center technologies, including multi-language translation on smud.org in eight languages, to enhance capabilities to support our customers. • Commercial Portal self-service launched by year-end. • Expansion of Community Impact Plan efforts including neighborhood electrification and workforce development activities • Increased lobby days from 1 to 3 days per month, connecting customers with resources and assistance
Operational: System	Cybersecurity	🟠	🟠	🟠	⬆	🟡	Globally, cybersecurity risks are increasing due to legacy infrastructure, increased reliance on third parties, and unintentional exposure from lack of awareness and continual threats on systems and assets from nation-states and bad actors. SMUD's cybersecurity mitigation activities are reported to the Policy Committee through the SD-16 and presented in closed session.

2023-2024 Risk Focus Areas

Risk Category	Risk	Year on Year Changes			Risk Trend	Target	Risk Mitigation Activity
		2022	2023	2024			
Operational: System	Data privacy	🟠	🟠	🟠	➡️	🟡	SMUD continues to see demand for SMUD customer data to be used and shared for additional purposes and programs, including customer personally identifiable information (PII). Requests for such data have come from internal programs, state agencies and vendors. SMUD's Data Sharing Policy and Process are in place to provide request tracking and approval to ensure that all sharing of PII is authorized and performed using a secure transfer mechanism.
Operational: Process	Grid infrastructure & operational adequacy	⬛	🟠	🟠	➡️	🟡	Significant grid improvements and new capacity projects in 2024, include: • Significant progress in the design and construction of 5 transmission substations. • Completed 30 substation upgrades for reliability and capacity, compared to 21 in 2023. • Completed many significant reliability projects within the Upper American River Project including control upgrades, replacement of critical parts, switchgear, an emergency generator upgrade and recreation facility improvements. • Significant reliability projects at our thermal plants include inspections and equipment overhauls, Cosumnes Power Plant (CPP) steam turbine generator line relay replacement and thermal transition studies. • Significant projects with our gas pipeline assets including the cathodic protection remediation project and the Franklin pipe replacement project. • Developed formal Asset Management Program and Strategy for power generation assets to improve work management, reduce risk and prioritize long term strategies.

2023-2024 Risk Focus Areas

Risk Category	Risk	Year on Year Changes			Risk Trend	Target	Risk Mitigation Activity
		2022	2023	2024			
Operational: Process	Grid infrastructure T&D	🟠	🟠	🟠	➡️	🟡	Staff continues to implement ongoing transmission and distribution (T&D) asset maintenance and multi-year replacement strategies using a risk-based approach, considering the assets' impacts to safety, load serving capability, reliability and regulatory compliance requirements. The 2025 capital portfolio includes completion of multi-year projects that are in flight and the start of projects to replace or upgrade substation transformers, circuit breakers and switchgear. The portfolio also includes funding for our ongoing pole replacement and cable replacement programs.
Operational: Process	Employee safety	🟡	🟡	🟡	↗️	🟢	Within SMUD operations, the health and safety of our employees, contractors and the public continue to be a primary focus. Safe work practices and hazard mitigation are deeply integrated in SMUD that reduce both the frequency and severity of incidents. We continue to follow the requirements outlined in the California Division of Occupational Safety and Health (Cal/OSHA) Injury Illness & Prevention Program (IIPP) and other required regulations. Key areas of risk mitigation measures include defined safety responsibilities for all personnel, adherence to OSHA regulatory compliance obligations, safety communications, hazard assessments, accident/exposure investigations, hazard corrective actions, safety training, and recordkeeping. In addition, SMUD continues to operate an industry leading, behavior-based safety program called Safely Conducted Observations Reduce Common Hazards (SCORCH).
Operational: Process	Physical asset security	🟡	🟡	🟡	⬆️	🟢	Facilities and Security Operations continue to address an increasing number of unauthorized encampments, trespass, and/or related vandalism incidents in or at our substations and other facilities as reported to the Board monthly. Staff continue to work with law enforcement and Sacramento County to address safety concerns of employees, the public, and our facilities. We are evaluating the use of robots, drones and AI to assist security personnel and reduce exposure.

2023-2024 Risk Focus Areas

Risk Category	Risk	Year on Year Changes			Risk Trend	Target	Risk Mitigation Activity
		2022	2023	2024			
Operational: Process	Power generation asset reliability	🟢	🟢	🟢	➡️	🟢	Staff has established processes to manage unexpected disruption to power generation and/or non-performance from power and gas contractual assets that threaten to cause partial or complete cessation of the day-to-day bulk power operations of SMUD. Staff continues to assess the reliability of SMUD's assets and performs standard maintenance and rebuilds where necessary to meet SMUD's current and future needs. In addition, staff continues to acquire critical long lead spare equipment and identify appropriate renewables resources in support of SMUD's zero carbon goals. See renewables projects for additional information.
External	Regulatory/legislative mandates	🟡	🟡	🟡	⬆️	🟢	Staff continues to monitor and stay apprised of all regulatory/legislative mandates that have the potential to impact SMUD. SMUD anticipates this risk increasing in 2025 due to the potential effects of the upcoming November elections on the energy industry, specifically related to grant funding and regulation changes. At the State level, staff continue to monitor potential state mandates that impact SMUD's zero carbon strategy.
Strategic	Renewable projects	⬛	🟡	🟡	➡️	🟢	In 2024, staff continued to identify appropriate resources to meet SMUD's needs and move SMUD closer towards the achievement of its zero carbon goals. Planned diversification of proven clean technologies and new technologies and business model evaluations ensure that the right projects and programs are selected to meet SMUD's goals in a reliable and affordable manner. SMUD continues to see risk increase in the renewable portfolio related to supply chain, land acquisition, development timelines, and cost. SMUD worked to alleviate these risks in 2024 by implementing a new land screening process and several portfolio management enhancements that work to proactively identify and mitigate risk. In 2025, staff will continue the development of the renewable portfolio and has received prioritization from the organization to execute those projects.

2023-2024 Risk Focus Areas

Risk Category	Risk	Year on Year Changes			Risk Trend	Target	Risk Mitigation Activity
		2022	2023	2024			
External	Severe weather (incl wind, heat, lightning, capacity)	🟡	🟡	🟡	➡️	🟡	Climate change increases the frequency, intensity, and impacts of extreme weather events. These impacts have a high potential to impact SMUD's goals and operations. SMUD has conducted lessons learned after events and used those lessons to make process changes and plan for future events. Staff continues to conduct tabletop exercises for a number of hazard events such as storms, wildfires, heat waves, and gas pipeline to name a few. Doing so helps SMUD proactively identify gaps and address them, preparing SMUD for future events.
Operational: People	Strategic workforce planning: critical positions	🟡	🟡	🟡	➡️	🟢	Staff conduct a bi-annual enterprise-wide role analysis to anticipate and mitigate risks of near-term and future workforce gaps. SMUD's Organizational Effectiveness team facilitates the strategic workforce planning program, enabling senior leaders and team members to analyze workforce data and consider several criteria to identify key roles, including impact on strategy, turnover, cost of turnover, level of effort to backfill, operational impact, customer service impact, and performance variability. In Q2 2024 we identified 7% of SMUD roles, or 57 total, as key roles and documented the rationale for selection as key. In Q3 we developed action plans to address workforce gaps in key roles. Action plans encompass 79 different solutions to mitigate current and future risks associated with the key roles. Action plans range in complexity – some are relatively simple where there a role has a single incumbent and requires knowledge transfer and cross training. Action plans can be much more complex. For example, in 2023 SMUD launched a robust Field Leader Program to address challenges in the transition from field to office. Action plans may identify the need for a new role. For example, in Energy Trading and Contracts, we're developing a new Market Performance Analytics role to help address the increased volatility of commodities markets.

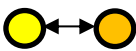| Risk Category	Risk	Year on Year Changes			Risk Trend	Target	Risk Mitigation Activity
		2022	2023	2024			
							While senior leadership drives the action plans, completing them involves support from Compensation & Classification, Talent Management, Labor Relations, Career Development & Learning and Regional Workforce Development teams. The Organizational Effectiveness team monitors progress and reports on the status of action plans quarterly. Due to the action plans being strategic and long-range in nature, staff will continue to facilitate progress and tracking through 2025. Also in 2025, staff will ask senior leaders to identify significant changes that requires reassessing key roles.
Operational: Process	Supply chain	🟡	🟡	🟡	⬆	🟢	The supply chain risk management program matured in 2024. Staff held regular recurring business review and demand planning meetings across several operational areas primarily focused on construction, material, and equipment contractors, including line transmission and distribution, substations, material planning, fleet, power generation, and facilities. These meetings were expanded to include additional areas with professional service and technology contractors during 2024. Staff established bulk purchasing agreements, new business service levels and replacement stock to reduce costs and lead procurement times.
							While efforts to mitigate this risk have improved operations, the risk trend is still increasing due to the considerable demand on transformers nationally and the amount needed by SMUD to meet regional growth and maintain a safety inventory.
							In 2024 and beyond, an opportunity area to focus on is third party risk management, in particular spending time managing performance and critical third-party relationships across all categories. Staff has developed updated solicitation and contract information including updated performance scorecards and procedures to support this effort. Supply chain staff recommends involving senior leadership in this process for the top suppliers measured by spend and criticality annually.

2023-2024 Risk Focus Areas

Risk Category	Risk	Year on Year Changes			Risk Trend	Target	Risk Mitigation Activity
		2022	2023	2024			
Strategic	Transportation sector electrification/Unmanaged electrification	🟡	🟡	🟡	⬆	🟡	SMUD has investigated the question of what electrification of buildings and transport will do to our grid for more than a decade. We continually improve our assessment approach as new data, forecasts, and technology change. This assessment process helps us plan for expected growth in a manageable way, to reduce the risk of us delaying connection of new electric loads. In addition, the assessment enables us to have a clear picture of the potential impacts in an unmanaged and a managed world. Mitigations implemented in 2024 include: • "Call SMUD First" campaign which is driving conversations earlier between SMUD and the customer to help support infrastructure planning. • Geospatially map where we have clusters of Electric Vehicle (EV) adoption aligned with overloaded transformers to help prioritize where infrastructure upgrades may need to be made. • Work with the Electric Power Research Institute (EPRI) through their EVs2Scale2030 initiative to utilize their tools and help support more standardization of processes across utilities. • Panel and grid innovation opportunities to support more electrification while optimizing grid and customer infrastructure investments. In 2025, staff plans to operationalize managed charging from a pilot to a program and update the Integrated Distributed Resource Plan (iDRP), which will refine our EV estimates and support our next iteration of the Integrated Resource Plan (IRP).
External	Wildfire	🟠	🟠	🟠	➡	🟡	SMUD has made considerable effort in completion of the Wildfire Mitigation Plan to reduce ignition risk in our service area, transmission line corridors and the Upper American River Project. These measures include vegetation management, response plans and exercises, emerging technologies and defensive maintenance.

TOP 10 ENTERPRISE RISKS COMPARED TO SMUD'S ENTERPRISE RISK CATEGORIES
Specific to Energy and Utilities Industry

Benchmarking Information indicates that SMUD's risks are consistent with other energy and utilities; one indicator that we are aligned in our understanding of risks facing our industry.

North Carolina State ERM Initiative and Protiviti Top 10 Enterprise Risks, abbreviated		SMUD's Corresponding Risks	SMUD's Current Residual Risk Exposure
	Specific to Energy and Utilities Industry		
1	Cyber threats	**Operational risk:** Cybersecurity	🟠
2	Regulatory changes and scrutiny	**External risk:** Legislative and regulatory	🟡
3	Catastrophic natural disasters and weather	**External risk:** Climate change Wildfire Severe weather	The current residual risk exposure ranges from medium to high 🟡↔🟠
4	Ability to attract, develop and retain top talent	**Operational risk:** Strategic workforce agility Competitive workforce total rewards Diversity, equity, inclusion and belonging Change management	🟡
5	Supply chain	**Operational risk:** Supply chain	🟡

TOP 10 ENTERPRISE RISKS COMPARED TO SMUD'S ENTERPRISE RISK CATEGORIES
Specific to Energy and Utilities Industry

North Carolina State ERM Initiative and Protiviti Top 10 Enterprise Risks, abbreviated		SMUD's Corresponding Risks	SMUD's Current Residual Risk Exposure
Specific to Energy and Utilities Industry			
6	Outsourced risks	**Operational risk:** Supply chain	🟡
7	Climate change and other sustainability policies, regulations, and disclosure requirements	**Strategic risk:** 2030 Zero Carbon Plan **External risk:** Legislative and regulatory	🟡
8	Economic conditions	**Financial risk:** Interest rate Commodity Project execution **Operational risk:** Strategic workforce agility **External risk:** Legislative and regulatory Economic business agility	🟡
9	Interest rates	**Financial risk:** Interest rate Energy commodity Capital availability/cashflow Liquidity Wholesale credit default	🟡
10	Legacy IT infrastructure	**Operational risk:** Technology Systems Infrastructure Applications Support **Strategic risk:** Changing Customer Expectations	🟡

<table>
<tr><td>SSS No.

BOD 2024-019</td><td colspan="2" align="center">BOARD AGENDA ITEM
STAFFING SUMMARY SHEET</td><td>Committee Meeting & Date
Policy – 11/13/24
Board Meeting Date
N/A</td></tr>
</table>

	TO			TO
1.	Suresh Kotha	6.		
2.	Brandy Bolden	7.		
3.	Farres Everly	8.		
4.		9.	**Legal**	
5.		10.	**CEO & General Manager**	

Consent Calendar		**Yes**	x	**No** *If no, schedule a dry run presentation.*	**Budgeted**	x	**Yes**		**No** *(If no, explain in Cost/Budgeted section.)*

FROM (IPR) Dave Tamayo / Crystal Henderson	DEPARTMENT Board Office	MAIL STOP B307	EXT. 5424	DATE SENT 10/17/24

NARRATIVE:

Requested Action: Allow the Board of Directors an opportunity to discuss the four standing committees, Strategic Development, Policy, Energy Resources & Customer Services (ERCS), and Finance and Audit, and review committee charters.

Summary: The Board committees are Strategic Development, Policy, ERCS, and Finance and Audit. By this discussion the Board will determine if these committees should continue as they currently stand.

Board Policy:
(Number & Title) This discussion supports Board policy Governance Process GP-8, Board Committee Principles, subsection (e) which states, "Standing Committees shall be reviewed at least annually by the Board to determine whether they should continue."

Benefits: Reviewing the committee charters and standing committees on an annual basis gives the Board the *opportunity* to make any necessary changes to the charters and committees.

Cost/Budgeted: There is no budgetary impact for this agenda item.

Alternatives: Not review the committees or charters at this time.

Affected Parties: Board of Directors

Coordination: Special Assistant to the Board

Presenter: Dave Tamayo, Committee Chair

Additional Links:

SUBJECT		ITEM NO. *(FOR LEGAL USE ONLY)*
	Annual Review of Standing Committees	

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SSS No.	**BOARD AGENDA ITEM**	Committee Meeting & Date
BOD 2024-020	**STAFFING SUMMARY SHEET**	Policy – 11/13/24
		Board Meeting Date
		November 21, 2024

	TO			TO
1.	Suresh Kotha	6.	
2.	Brandy Bolden	7.	
3.	Farres Everly	8.	
4.		9.	**Legal**
5.		10.	**CEO & General Manager**

Consent Calendar		**Yes**	x	**No** *If no, schedule a dry run presentation.*	**Budgeted**	x	**Yes**		**No** *(If no, explain in Cost/Budgeted section.)*

FROM (IPR)	DEPARTMENT	MAIL STOP	EXT.	DATE SENT
Dave Tamayo / Crystal Henderson	Board Office	B307	6155	10/17/24

NARRATIVE:

Requested Action:	Allow the Board of Directors an opportunity to discuss Board Officer positions for 2025.
Summary:	The Directors will discuss and make recommendations for Board President and Vice President for January through December of the upcoming year.
Board Policy: *(Number & Title)*	Governance Process GP-5, Election of the Board President and Vice President, states that "[t]he Board shall elect each year a president and vice president to preside over it…." This discussion supports the governance process.
Benefits:	Having this discussion will allow the Directors a forum to voice their choices for President and Vice President for the upcoming year.
Cost/Budgeted:	There is no budgetary impact for this requested action.
Alternatives:	Not select Board Officers at this time.
Affected Parties:	Board of Directors
Coordination:	Special Assistant to the Board
Presenter:	Rosanna Herber, Board President

Additional Links:

SUBJECT	**Election of Officers for 2025**	ITEM NO. *(FOR LEGAL USE ONLY)*

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SSS No. BOD 2024-05	**BOARD AGENDA ITEM** **STAFFING SUMMARY SHEET**	Committee Meeting & Date POLICY – November 13, 2024
		Board Meeting Date N/A

TO				TO	
1.	Suresh Kotha		6.		
2.	Brandy Bolden		7.		
3.	Farres Everly		8.		
4.			9.	**Legal**	
5.			10.	**CEO & General Manager**	

Consent Calendar		**Yes**	x	**No** *If no, schedule a dry run presentation.*	**Budgeted**	x	**Yes**		**No** *(If no, explain in Cost/Budgeted section.)*

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	**Board Work Plan**	ITEM NO. *(FOR LEGAL USE ONLY)*

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

	TO			TO	
1.	Suresh Kotha		6.		
2.	Brandy Bolden		7.		
3.	Farres Everly		8.		
4.			9.	**Legal**	
5.			10.	**CEO & General Manager**	

Consent Calendar	**Yes**	x	**No** *If no, schedule a dry run presentation.*	**Budgeted**	x	**Yes**	**No** *(If no, explain in Cost/Budgeted section.)*

FROM (IPR) Dave Tamayo / Crystal Henderson	DEPARTMENT Board Office	MAIL STOP B304	EXT. 5424	DATE SENT 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	**Summary of Committee Direction - Policy**	ITEM NO. *(FOR LEGAL USE ONLY)*

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.