

Exhibit to Agenda Item #1

Discuss the monitoring report for Strategic Direction SD-17,
Enterprise Risk Management.

Board Policy Committee and Special SMUD Board of Directors Meeting
Wednesday, November 13, 2024, scheduled to begin at 6:00 p.m.
SMUD Headquarters Building, Auditorium

SD-17 Enterprise Risk Management (ERM)

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.

SMUD is compliant with SD-17, Enterprise Risk Management Policy

Background

June Policy Committee Recap

- KPMG, a global consulting firm, completed a maturity assessment of SMUD's Enterprise Risk Management (ERM) program in April 2024
- Summary of ERM program refresh:
 - Alignment to SMUD's strategy
 - Emphasis on risk focus areas
 - Connect top-down and bottom-up risks
 - Move from annual to quarterly board reporting
 - Move from monthly to quarterly commodity risk exposure analysis

Changing Risk Landscape

North Carolina State ERM Initiative and Protiviti Executive Survey for energy/utility industry, 2024

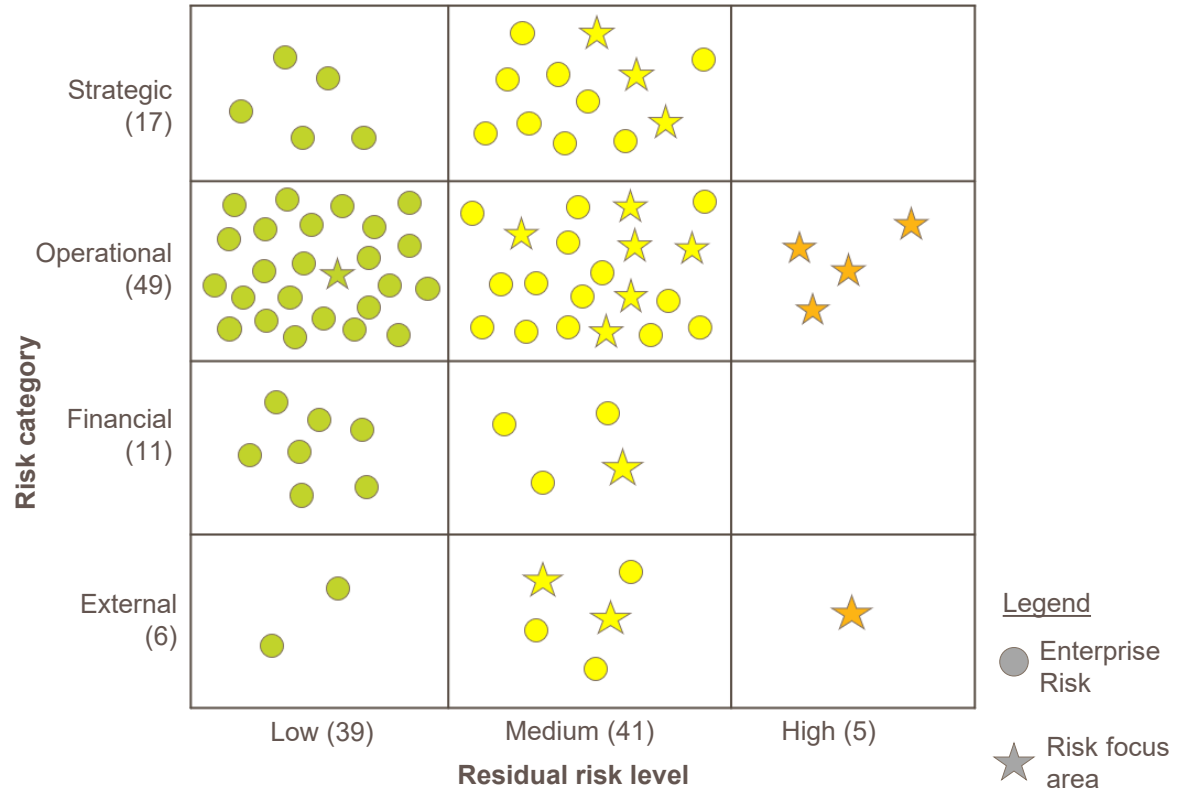
Top Industry-Wide Risks for 2024	▲/▼ from 2023
Cyber threats	▲
Regulatory changes and scrutiny	▲
Catastrophic natural disasters and weather	▼
Ability to attract, develop and retain top talent	▼
Supply chain	▼
Outsourced risks	▲
Climate change and other sustainability policies, regulations, and disclosure requirements	▲
Economic conditions	▼
Interest rates	▼
Legacy IT infrastructure	New



Risk Dashboard

Purpose: Effectively balance and manage risk to further SMUD's policies and business goals (SD-17)

Summary of all risks by category and residual risk level



Risk focus areas (2023-2024)


Risk Category	Risk Focus Area	Residual Risk
Strategic	Changing customer expectations ^(new)	med.
	Renewable projects	med.
	Unmanaged electrification	med.
Operational	Cybersecurity	high
	Data privacy	high
	Grid infrastructure & operational adequacy^(new)	high
	Grid infrastructure T & D	high
	Control center	med.
	Business continuity and disaster recovery	med.
	Physical asset security	med.
	Strategic workforce planning: Critical positions	med.
	Supply chain	med.
	Employee Safety	med.
	Power generation asset reliability	low
Financial	Price volatility: Commodity	med.
External	Wildfire	high
	Regulatory/legislative mandates	med.
	Severe weather	med.

Recent Changes

Date	Category	Risk Name	Change
Sept 2024	External	Business Agility	Residual Risk: Med to Low
Sept 2024	Operational	Demand Response	Residual Risk: Low to Med

2024 Risk Management Highlights

Category	Risk focus area	Exposure	Trend	Mitigations	Relevant report
Strategic	Changing customer expectations	Medium	↑	<ul style="list-style-type: none"> New features in My Energy Tools New contact center technologies, including multi-language translation Expansion of Community Impact Plan efforts 	SD-5, Aug 2024
	Renewable projects	Medium	→	<ul style="list-style-type: none"> New land screening process Portfolio management enhancements 	Zero Carbon Update, Sept 2024
	Unmanaged electrification	Medium	↑	<ul style="list-style-type: none"> Research and development on panels Managed charging pilot maturity “Call SMUD First” Campaign 	SD-10, Oct 2024
Operational	Cybersecurity	High	↑	<ul style="list-style-type: none"> Mitigations reported through SD-16 and discussed in closed session 	SD-16, Nov 2024
	Data privacy	High	→	<ul style="list-style-type: none"> Data sharing policy and processes 	SD-16, Nov 2024
	Grid infrastructure & operational adequacy	High	→	<ul style="list-style-type: none"> Significant progress in design and construction of 5 transmission substations Completed 30 substation upgrades 	SD-4, June 2024
	Grid infrastructure T&D	High	→	<ul style="list-style-type: none"> Ongoing T&D asset maintenance Multi-year replacement strategies using a risk-based approach 	SD-4, June 2024
	Business continuity & disaster recovery	Medium	↓	<ul style="list-style-type: none"> Implemented new Business Continuity Management (BCM) Solution Initiated process to validate and catalog technology applications Crowdstrike response 	CIO Board letter

 Risk trend changed from 2023 to 2024
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2024 Risk Management Highlights

Category	Risk focus area	Exposure	Trend	Mitigations	Relevant report
Operational, Cont.	Control center	Medium	➡	<ul style="list-style-type: none"> Acquired land for new power control center CA Environmental Quality Act (CEQA) complete in near future 	Oct 2024
	Physical asset security	Medium	⬆	<ul style="list-style-type: none"> Work with Law Enforcement to address safety concerns Evaluating use of robots, drones, and AI to assist security personnel 	SD-6, Oct 2024
	Employee safety	Medium	↗	<ul style="list-style-type: none"> Safely Conducted Observations Reduce Common Hazards (SCORCH) program Culture of safety 	SD-6, Oct 2024
	Strategic workforce planning: critical positions	Medium	➡	<ul style="list-style-type: none"> Bi-annual role analysis 7% of SMUD roles identified as “key” Continuing to develop action plans for all key roles 	SD-8, May 2024
	Supply chain	Medium	⬆	<ul style="list-style-type: none"> Contractor Code of Conduct Demand planning Implemented bulk purchasing efforts 	June 2024
	Power generation asset reliability	Low	➡	<ul style="list-style-type: none"> Established processes to manage unexpected disruption 	SD-4, June 2024

☐ Risk trend changed from 2023 to 2024

2024 Risk Management Highlights

Category	Risk focus area	Exposure	Trend	Mitigations	Relevant report
Financial	Price volatility: commodity costs	Medium	⇒	<ul style="list-style-type: none"> Northern California Energy Commodity Prepay Restructuring Power Procurement Directive 	SD-17, June 2024 Nov 2024
External	Wildfire	High	➔	<ul style="list-style-type: none"> 2024-28 Hazard Mitigation Plan (HMP) submitted Vegetation management 	HMP, Feb 2024 SD-4, June 2024
	Legislative / Regulatory	Medium	⬆	<ul style="list-style-type: none"> State and Federal monitoring Western Electricity Coordinating Council “mock” audit 	Monthly board report
	Severe weather	Medium	⇒	<ul style="list-style-type: none"> Storm response team Mock storm exercises 	SD-4, June 2024

 Risk trend changed from 2023 to 2024

2025 ERM Look-Ahead

- Restructure risk focus areas to be cross-functional, top-down views with connections to current, bottom-up risks
- Revisit risk scoring, metrics, and reporting
- Introduce emerging risk discussion
- Enhance risk governance and control environment by coordinating with Internal Audit on integrated assurance mapping
- Continue to build a risk-intelligent culture

Thank you!