

Exhibit to Agenda Item #3

Board Finance & Audit Committee Meeting and Special SMUD Board of Directors' Meeting

Tuesday, June 5, 2018, scheduled to begin at 5:30 p.m.

Customer Service Center, Rubicon Room

Risk Category-Data Privacy

- Establish Data Privacy as its own category to emphasize the importance of and SMUD's commitment to the proper management of personally identifiable information (PII).
- This also allows more comprehensive risk management of PII separately from cyber security because not all potential data breaches result from a cyber incident.

SD-17 ERM Portfolio: Residual Business Critical Risk Exposure: June 5, 2018

| Financial Risks | Operational Risks | Operational Risks | Strategic Risks |
|----------------------------------|--|---|--|
| Budget Planning & Rate Setting | OP: People | <i>Secondary Network</i> | Business Model |
| <u>Financing</u> | Employee Safety | <i>Underground Cables</i> | Technology/Competition Driven |
| Accounting/Financial Report | Ethics/Integrity | T&D Substation Assets | <i>Demand Response</i> |
| Capital Availability/Cashflow | Illegal Acts/Fraud | Telecommunications Assets | Distributed Generation |
| Liquidity | Strategic Workforce Agility | New Services & Local Agency Projects | <i>Distributed Storage</i> |
| Load Variation | OP: Systems and IT | Labor: Business Disruption | Electrification of Transport Sector |
| Retail Load | Applications Support | Legal Risk | Energy Efficiency |
| Customer owned generation | Cyber Security | Operational Excellence | Innovation |
| Price Volatility | Privacy | Payroll Disruption | Changing Customer Expectations |
| Commodity | Information Management | Pricing & Rate Design Implementation | Competitive Workforce Total Rewards |
| Hydro Generation | Data Governance | EAPR Implementation Process | Corporate Governance |
| Interest Rate | Data Availability | TOD Implementation Process | Board Driven |
| Project Execution | Enterprise-Wide Documentation | Public Safety | GM Driven |
| Wholesale Credit Default | Grid Operational Systems & Support | Regulatory Compliance Practices | Enterprise Grant Integration, Execution and Alignment |
| | Systems Infrastructure | CPUC General Orders | Sustainable Energy |
| | OP: Process | Environmental Protection | Carbon Emission/AB32 |
| | Balancing Authority Operations | Hydro License | Load Serving Capability |
| | Bulk Power Op & Maintenance | NERC/FERC Standards | Renewable Portfolio Standard |
| | Gas & Gas Pipeline Assets | Nuclear Waste | External Risks |
| | Power Supply Assets | Revenue Collection Ops & Maintenance | Economy - Business Agility |
| | Transmission Assets | Meter to Cash | Legislative & Regulatory |
| | Business Continuity | Supply Chain | Federal |
| | Communications | Material Lifecycle | Dodd-Frank Implementation |
| | Internal Communications/Alignment | | Limits on Muni Bond Tax Exemption |
| | <i>Media & Community Relations</i> | | FERC Order 1000 |
| | Customer Serv Operations | | Local Gov't |
| | General Facilities Op & Maintenance | | State |
| | Customer Service Center | | Bay Delta Flow Issues |
| | Energy Management Center | | CEC: Intergrated Resource Planning |
| | Existing Corporation Yard | | Post 2020 Carbon Markets |
| | Headquarter Building | | <i>RPS Eligibility Related Issues</i> |
| | Physical Asset Security | | Natural / Other Hazards |
| | Grid Infrastructure: Reliability | | Wildfire |
| | T&D Line Assets | | Climate Change |
| | <i>Poles</i> | | |
| Legend: by Risk Heat Zone | | | |
| Extremely High Residual Risk | | | |
| High Residual Risk | | | |
| Medium Residual Risk | | | |
| Low Residual Risk | | | |
| Extremely Low Residual Risk | | | |
| Recent Changes denoted in Purple | | | |

| Risk Title | Update | Risk Trend | Current Residual Risk | Target Residual Risk |
|-------------------------------|---|------------|-----------------------|----------------------|
| Cyber Threats & Privacy | Staff continues to monitor and assess cyber and privacy risks. | ↑ | ● | ● |
| Aging Infrastructure | Staff continues to assess SMUD assets to determine other categories of equipment where it makes sense to implement asset health index or asset criticality index methodologies. | ↑ | ● | ● |
| Strategic Workforce Agility | Staff continues to work to build a strategy for workforce recruitment, training and retention. | ↑ | ● | ● |
| Changing Customer Expectation | Staff continually assesses customer expectations via survey and market trends to anticipate customers needs and build strategies to address customer needs. | ↑ | ● | ● |
| Rapid Innovation | Staff continually monitors and analyzes trends in innovation in the current and future electric market and its implications or impact on SMUD's business model and respond accordingly. | ↑ | ● | ● |