Board Policy Committee
Meeting and Special SMUD
Board of Directors Meeting

Date: Wednesday, December 4, 2019
Time: Scheduled to begin at 5:30 p.m.
Location: SMUD Customer Service Center, Rubicon Room
6301 S Street, Sacramento, CA

Powering forward. Together.
AGENDA
BOARD POLICY COMMITTEE MEETING
AND SPECIAL SMUD BOARD OF DIRECTORS MEETING

Wednesday, December 4, 2019
SMUD Customer Service Center, Rubicon Room
6301 S Street, Sacramento, California
Scheduled to begin at 5:30 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:

DISCUSSION ITEMS

1. Steve Lins  
   Accept the monitoring report for Strategic Direction SD-11, Public Power Business Model.  
   Presentation: 10 minutes  
   Discussion: 5 minutes

2. AJ Jacobs  
   Accept the monitoring report for Strategic Direction SD-16, Information Management and Security.  
   Presentation: 10 minutes  
   Discussion: 10 minutes

3. Toni Hoang  
   Accept the monitoring report for Strategic Direction SD-17, Enterprise Risk Management.  
   Presentation: 7 minutes  
   Discussion: 5 minutes

4. Laurie Rodriguez  
   Discuss, with possible amendment, Governance Process GP-12, Board Compensation and Benefits.  
   Presentation: 5 minutes  
   Discussion: 5 minutes

INFORMATIONAL ITEMS

5. Rob Kerth  
   Discuss Committee Membership and Chairs for 2020.  
   Presentation: 5 minutes  
   Discussion: 5 minutes
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<thead>
<tr>
<th></th>
<th>Name</th>
<th>Item Description</th>
<th>Duration</th>
</tr>
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<tbody>
<tr>
<td>6</td>
<td>Rob Kerth</td>
<td>Discuss Committee Topic Ideas for 2020.</td>
<td>Presentation: 5 minutes, Discussion: 5 minutes</td>
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<tr>
<td>7</td>
<td>Rob Kerth</td>
<td>Board Work Plan.</td>
<td>Discussion: 5 minutes</td>
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<tr>
<td>8</td>
<td>Public Comment</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>Heidi Sanborn</td>
<td>Summary of Committee Direction.</td>
<td>Discussion: 1 minute</td>
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Members of the public wishing to address the Committee should complete a sign-up form available at the table outside of the meeting room. Members of the public shall have up to three (3) minutes to provide public comment. The total time allotted to any individual speaker shall not exceed nine (9) minutes for the entire Committee meeting time.

Members of the public wishing to inspect public documents related to agenda items may call 916-732-7143 to arrange for inspection of the documents at the SMUD Customer Service Center, 6301 S Street, Sacramento, California.

NOTE: Accommodations are available for the disabled public. If you need a hearing assistance device or other aid, please call 916-732-7143 in advance of this Committee Meeting.
Situation: The attached 2018 annual monitoring report provides the Board with a status report of legislation and regulations that impact SD-1, Public Power Business Model. This core value was established to support public power and preserve local decision making.

Board Policy:
SD-11 Public Power Business Model

Benefits: Receive input and opportunity to make corrections, additions, or changes if necessary.

Cost/Budgeted: N/A

Alternatives: N/A

Affected Parties: SMUD and Board of Directors

Coordination: Legislative and Regulatory Affairs and Legal Department

Presenter: Steve Lins
TO: Board of Directors  

FROM: Claire Rogers  

SUBJECT: Audit Report No. 28007107  
Board Monitoring Report; SD-11: Public Power Business Model  

Audit and Quality Services (AQS) reviewed the SD-11: Public Power Business Model 2019 Annual Board Monitoring Report and performed the following:  

- Reviewed the information presented in the report to determine the possible existence of material misstatements;  
- Interviewed report contributors and verified the methodology used to prepare the monitoring report; and  
- Validated the reasonableness of a selection of the report's statements and assertions.  

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

CC:  

Arlen Orchard
1. Background

Strategic Direction 11, Public Power Business Model states that:

Supporting and strengthening the public power business model is a core value. Local decision making and flexibility are essential to effective and responsible local governance. Community-owned utilities are primarily accountable to their customers, who are their owners, not stockholders. Community citizens have a direct voice in public power decisions.

Preservation of this business model is vital to ensure public power systems continue to provide innovative solutions tailored to best meet the needs of their customers and communities.

2. Executive Summary

SMUD is in compliance with SD-11.

The SD-11 monitoring report updates the Board on our efforts to insulate SMUD from issues that may impact our local governance and provide the Board with a final status report on 2019 issues impacting this strategic directive. SMUD's interests are advanced in the legislative and regulatory arenas to the greatest extent possible. For instance, SMUD meets with key federal and state officials, both elected and appointed, with the driving purpose of educating them on the impact of new and existing policy.

State Legislative. Before the State Legislature, priorities for SMUD this year included passing our sponsored bill on nonstock equity, working on policy related to wildfires, and blocking a bill that would have prohibited SMUD from instituting grid charges for solar customers. Assembly Bill (AB) 689 (McCarty) was signed into law by the Governor in September and allows SMUD to operate 3 pilot projects over five years to hold nonstock security in a company with which we partner. AB 1054 (Holden), and its companion bill AB 111 (Budget), both signed into law, were intended to fill in the gaps left by last year's wildfire bill, SB 901. Another priority this year was defeating SB 288 (Wiener), which was intended to prohibit SMUD and other utilities from instituting grid charges for solar customers.

State Regulatory. There were numerous workshops and regulatory proceedings that SMUD staff participated in, including California Air Resources Board (CARB) proceedings to modify the Low Carbon Fuel Standard (LCFS) regulations, and the gas insulated equipment sulfur hexafluoride (SF₆) regulations. Both of these regulatory proceedings are ongoing, and at least one is likely to extend into 2020. At the California
Energy Commission (CEC), SMUD staff participated in a variety of energy efficiency processes, a proposed rulemaking on the Power Content Label, and implementation activities pursuant to new data collection requirements. SMUD developed and submitted the first application for the community solar alternative to the mandated solar provision in the 2019 Building Standards. The Neighborhood SolarShares Program provides developers with choice of a compliance option that supports the State’s goal of encouraging the development of more affordable housing by providing a lower cost method of meeting the mandate while ensuring equivalent carbon reduction benefits. At a CEC Business Meeting on November 13, 2019, the CEC tabled the program for further consideration of the definition of community solar, and the flexibility benefits of batteries. The Power Content Label regulatory proceeding is ongoing. Adoption may occur in 2019, but the rulemaking could also extend into 2020. Implementation of the new data collection requirements is proceeding, but the most detailed data is on hold as data formats, protocols, and security are worked out with the obligated utilities.

**Federal.** At the federal level, SMUD staff continued to build solid relationships with the Sacramento area’s congressional delegation amid a change to Democratic control in the House of Representatives that placed SMUD’s House delegation sharply at odds with the Republican Trump Administration. For the third consecutive year, we worked with our public power brethren to successfully push back on the Administration’s budget proposal to divest transmission assets of the federal power marketing administrations (PMAs). SMUD also continues to play a leadership role among utilities challenging the U.S. Environmental Protection Agency (EPA) and National Highway Transportation Safety Administration’s (NHTSA) proposal to rollback national vehicle emissions standards and revoke California’s Clean Air Act waiver. Staff continued working SMUD’s close relationships in Congress to advance our legislative priorities, including leveraging our partnership with Congresswoman Doris Matsui to advance House legislation that would authorize a consolidated interim storage pilot for spent nuclear fuel.

CCAs. This year, SMUD operationalized data management and call center services for a second Community Choice Aggregator (CCA) client, East Bay Community Energy (EBCE) in Alameda County. CCAs are local governments situated in the service territory of an incumbent IOU that want greater local control over their electricity rates and more access to renewable energy. SMUD’s mission is strongly aligned with the CCA model, which has core goals of local decision making, customer/community focus, and environmental stewardship. Serving CCAs supports the public power model and provides a new revenue source for SMUD to help fund investments necessary to modernize the grid and expand offerings to our customers.

As SMUD’s Strategic Plan indicates, internal and external factors are driving our business and shaping our business model. Legislative and regulatory uncertainty continues to be a threat to the Public Power Business Model SD-11. SMUD takes positions on legislation and regulations based on the Board’s Strategic Direction.
3. Additional Supporting Information

Local decision making and flexibility are essential to effective and responsible local governance. High priority 2019 issues were as follows:

- Policy relating to California wildfires
- Protect Board's ability to set rates
- Pass legislation allowing SMUD to hold nonstock security
- Protect against unnecessary and costly resource procurement mandates
- CEC proceeding regarding how the Power Content Label includes unbundled renewable energy credits (RECs) and greenhouse gas (GHG) intensity information
- CEC implementation of efficiency benchmarking expansion and more detailed data collection requirements
- CARB proceeding to modify the Low Carbon Fuel Standard (LCFS) regulation
- CARB proceeding to modify the SF₆ regulations
- Legislation pending in Congress to restore the cost-savings benefits of advance refunding, or refinancing municipal bonds

4. Challenges:

Election cycles and changes in party leadership shift policy direction which can be difficult at times. In addition, SMUD continues to face prescriptive legislative and regulatory mandates for energy efficiency, carbon reduction, renewable energy, data requirements, and resource planning, in part because of the State's robust climate change goals. SMUD faced a new challenge this year of navigating prescriptive CEC requirements for our Neighborhood SolarShares Program that go beyond the letter of the regulations.

5. Recommendation

It is recommended that the Board accept the Monitoring Report for SD-11.

6. Appendices

Community Choice Aggregation (CCA)

SMUD ventured into providing services to CCAs in California to diversify our revenue sources in a way that is consistent with supporting public power and environmental goals in California. SMUD is providing Valley Clean Energy (VCE) in Yolo County with call center, data management, wholesale energy, and operational services. SMUD is supporting East Bay Community Energy (EBCE), with call center and data management services. Both of SMUD's CCA clients began serving customers on June 1, 2018. SMUD also provides program design, development, and administration services to Silicon Valley Clean Energy (SVCE).
These CCAs allow their customers to access many of the same public power benefits that SMUD and other POUs have provided millions of Californians. SMUD is leveraging our 70 years of experience as a utility, staff expertise, and existing systems to provide skilled services to CCAs, generating new revenue and strengthening SMUD’s ability to provide cost effective public power service to our customers.

There are currently 20 active CCAs in California, and many more that are emerging or investigating the feasibility of starting a new CCA.

State Legislation that Impacted SD-11

SMUD Sponsored Bill

AB 689 (McCarty): Nonstock Security
SMUD sponsored AB 689, which allows SMUD to operate a pilot project, until January 1, 2025, to allow SMUD to hold nonstock security in a company with which we partner, as part of a procurement of goods or services from that entity. The bill limits the pilot program to 3 acquisitions and requires any profit or gain to be used to benefit SMUD customers. The bill also requires SMUD’s Board of Directors to undertake a number of tasks, including establishing a policy governing our acquisitions.

SMUD Position: Sponsor
Status: Passed and signed by Governor

Staff Comment: This bill allows SMUD to better partner with corporations and startups that could help provide the necessary innovations for SMUD to reach its clean energy, greenhouse gas emissions reduction, and electrification goals, while providing potential to financially benefit our customers. The bill requires SMUD’s Board of Directors to undertake a number of tasks, including establishing a policy governing our acquisitions.

Wildfires

AB 1054 (Holden)/AB 111 (Budget Committee): Wildfire Cost Recovery
AB 1054 establishes an IOU-only wildfire fund, overhauls IOUs' ability to recover costs from wildfires from ratepayers, and significantly increases CPUC oversight over IOU Wildfire Mitigation Plans. The bill establishes the California Wildfire Safety Advisory Board, consisting of 7 members, to advise and make recommendations related to wildfire safety. The bill requires that POUs submit, by July 1 of each year, their plans to the Wildfire Safety Board to provide comments and an advisory opinion to each POU. POUs are required to comprehensively revise their plans at least once every 3 years. AB 111, a companion bill, moves the CPUC Wildfire Safety Division’s powers and responsibilities to a new Office of Energy Infrastructure Safety within the Natural Resources Agency by July 1, 2021.

SMUD Position: Watch
Status: Passed and signed by Governor
Staff Comment: Initial drafts of AB 1054 would have given the CPUC oversight over POU Wildfire Mitigation Plans. Our POU coalition was successful in removing POUs from CPUC oversight – the Wildfire Safety Advisory Board is an independent Board that can review and comment on the POU Wildfire Mitigation Plans, but will not have regulatory authority over POUs. Earlier versions of the bill would have required POUs to submit their Wildfire Mitigation Plans to the CPUC. POUs were also successful in preventing this jurisdictional creep and maintaining local control.

**SB 209 (Dodd): Wildfire Forecast and Threat Intelligence Integration Center**

SB 209 requires CALFIRE and the Office of Emergency Services to establish and lead the Wildfire Forecast and Threat Intelligence Integration Center to serve as the State’s central organizing hub for wildfire forecast, weather data, atmospheric conditions, etc. to improve how wildfire threats are identified, understood, and shared in order to reduce threats to California government, businesses, consumers. The Center is comprised of representatives from specified state and other entities and includes a publicly owned utility representative to be jointly selected by the Director of Emergency Services and the CALFIRE Director.

SMUD Position: Watch
Status: Passed and signed by Governor

Staff Comment: Our POU coalition worked to ensure a POU representative was represented at the Center. We also agreed to having OES and CALFIRE appoint the member.

**AB 868 (Bigelow): Deenergization Protocols**

AB 868 would require IOUs that deenergize portions of the distribution grid as a wildfire mitigation measure to adopt protocols, as defined, for when deenergization will be undertaken and for providing notice to customers affected by the shut-off including schools, water suppliers, wastewater agencies etc., and other steps to minimize any adverse impact.

SMUD Position: Watch
Status: The bill did not move this year. The author has the option of moving the bill next year.

Staff Comment: Initial drafts of AB 868 included publicly owned utilities as well. Our POU coalition worked to ensure POUs maintained independent oversight over their processes.

**Renewable Energy**

**SB 288 (Wiener) Self Generation**

This bill would have required the Energy Commission to establish a streamlined process for POU interconnection requests for storage and solar. It also would have required POU Boards to create a tariff for storage that exports to grid; remove any barriers, such
as prohibitions on exports for energy storage; and, ensure renewable energy or storage
are not subject to discriminatory fees or charges (e.g. grid charges for solar).

SMUD Position: Moved from oppose to neutral
Status: The bill did not move this year. The author has the option of moving the bill next
year.

Staff comment: This issue was dropped by the author due to the robust opposition from
utilities, labor and others mostly due to the provision that prohibited discriminatory fees
or charges. This issue is bound to return in 2020.

Centralized Procurement
AB 56 (E. Garcia): Statewide Procurement Entity
This bill requires that the CPUC empower the California Energy and Advanced
Transportation Financing Authority to undertake backstop or backup procurement of
electricity that would otherwise be performed by an IOU to meet the state resource
adequacy, integrated resource planning, and renewable portfolio standard goals not
satisfied by load serving entities including CCAs.

SMUD Position: Moved from oppose to neutral
Status: The bill did not move this year. The author has the option of moving the bill next
year.

Staff comment: In response to the growth of CCAs and the resulting lull in the new IOU
large procurements, the goal for this bill was to have the State procure resources to fill
identified needs, possibly for the CCAs. Previous versions of the bill authorized a new
central statewide entity to procure resources for all end-use customers in the state,
including POU customers. After expressing that procurement is not a problem for POUs,
POUs were removed from the bill.

Vehicle Grid Integration
SB 676 (Bradford): Vehicle Grid Integration
The bill requires each POU serving more than 700 gigawatt hours of annual electrical
demand, in each IRP adopted on and after January 1, 2020, to consider establishing
vehicle grid integration strategies and evaluate how their existing and planned programs
further those strategies. This bill also requires the CPUC, by December 31, 2020, to
establish strategies and quantifiable metrics to maximize the use of feasible and cost-
effective electric vehicle grid integration by January 1, 2030.

SMUD Position: Moved from oppose to neutral; CMUA moved from oppose to neutral
Status: Passed and signed by Governor

Staff comment: The author accepted amendments that removed the POU mandate
requiring VGI.
Local Government

AB 1486 (Ting): Surplus Land Act
The current Surplus Land Act requires local agencies to first offer surplus land to schools, parks and recreation, open space, and affordable housing agencies before disposing of it to any other kind of entity. AB 1486, however, requires district boards to first make a finding that a parcel of land is surplus before it may be sold. The bill also redefines what is considered surplus land.

SMUD Position: Watch; CSDA and CMUA moved from oppose unless amended to neutral.
Status: Passed and signed by the Governor

Staff Comments: Many special districts have statutory authority to own and develop real estate, establish long-term leases for unused land, for example. CSDA was able to secure amendments that permit a wide range of "uses" of surplus land, including commercial, retail or entertainment uses if the district board declares that the "agency's use" of the surplus land either directly furthers the express purpose of agency work or operations or is expressly authorized by a statute governing the district.

AB 849 (Bonta): City and County Redistricting
This bill requires the governing bodies of cities and counties when adopting new district boundaries after each federal decennial census to hold several public hearings before and after a district map is drawn; hold hearings on the weekend or in the evening during the work week. The bill would require the local bodies to encourage underrepresented and non-English speaking communities to participate in the process by, 1) noticing key media groups, 2) providing live translation of applicable languages if requested, 3) following new timelines for meeting notices, and 4) including a dedicated internet page, among other things.

SMUD Position: Watch
Status: Passed and signed by Governor

Staff Comments: Previous versions of the bill included special districts. SMUD worked with CSDA to remove special districts from the bill.

AB 1184 (Gloria): Email Retention
This bill requires public agencies to retain and preserve for at least 2 years every public record, as defined, that is transmitted by email.

SMUD Position: Watch; CMUA and CSDA opposed
Status: Vetoed by Governor – The Governor felt there would not be greater transparency if the emails were kept 2 years.

Staff Comment: Earlier versions of the bill required public agencies to retain and preserve every electronic writing transmitted (email, text, social media) for a period of at
least 2 years. We were successful in achieving amendments that limited the scope to only emails that are considered a public record.

State Regulation that Impacted SD-11

California’s Greenhouse Gas Policies
In 2018, CARB adopted amendments to the LCFS regulation that provide more credits to electricity as a transportation fuel, add credits for DC fast charger installations, and used some utility LCFS revenue for a statewide electric vehicle point of purchase rebate program. In 2019, CARB is proposing regulatory changes that would shore up cost containment in the LCFS program and would include provisions allocating a percentage of LCFS credit revenues to disadvantaged communities. CARB is also examining modifications to the SF₆ regulations, including a potential “phaseout” of utility SF₆ equipment by size class and switching from a format that allows no more than 1% annual leakage to a format that allows no more than an absolute standard tonnage of leakage for each utility. CARB and the Emissions Market Advisory Council are also considering potential changes to allowance allocation policy.

SMUD has argued for:
• Continued flexibility in how POUs can use allowance value;
• Support for the LCFS cost-containment proposals;
• A change in how administrative costs are allocated for the LCFS disadvantaged community programs;
• No change in the overall amount of allowances in the Cap and Trade program and no change to banking rules;
• Continuation of existing Cap and Trade banking rules;
• Keeping the maximum allowances in the market, rather than removing based on current perceived “oversupply”;
• Any SF₆ “phaseout” to include technical exemptions and be further out in time to reflect expected availability of non-SF₆ equipment by size.

Status. CARB is considering additional changes to the LCFS regulation by the end of the year or early 2019 to shore up cost containment provisions and set aside some revenues for disadvantaged community programs.

Energy Efficiency Policies
CEC adopted significant modifications to energy efficiency policies for existing buildings, including a comprehensive “benchmarking” structure for buildings pursuant to AB 802 (2015). CEC adopted changes to building standards for the first-time mandating rooftop solar on all new low-rise residential homes starting in 2020, with a community solar compliance option. This year SMUD argued for consideration of community solar and a variety of storage technologies in the proposed 2019 building standards.

Status: The benchmarking regulatory rules pursuant to AB 802 were adopted by CEC in 2017. SMUD has changed internal protocols to prepare for the increased and changed benchmarking requests from customers. The initial year under the new benchmarking
provisions saw a significant increase in the number of buildings requesting utility data from SMUD. Benchmarking implementation is phased over a couple of years, so SMUD is still adjusting to the increased requests for utility data. Additionally, SMUD has developed and submitted the first application for the community solar alternative to the mandated solar provision in the 2019 Building Standards. The November 13, 2019 CEC Business Meeting considering the program approval revealed CEC desire to explore the definition of community solar and the flexibility related to batteries before they are willing to make a decision. SMUD is working with stakeholders to amend the application to address issues raised by CEC Commissioners. We are targeting a CEC Business Meeting in February for review of the amended program.

**Data Reporting Policies**

Last year, the CEC adopted modifications to its data regulations that would require significantly more detailed reporting from SMUD about solar generators, storage systems, and customer electricity loads. SMUD had argued for a significant reduction in the data that is being requested.

Status: The initial data filing of generator data down to the smallest photovoltaic (PV) system happened in the summer of 2018. Two more filings came in January and July of 2019, and SMUD continues to work out small kinks in the submittal process. Compliance with the detailed interval meter data has been postponed as the CEC and utilities work out the protocols for data structure and data submittal and discuss data security. We expect the CEC to open a second data proceeding aimed at information related to electric vehicle charging and opportunities to reduce the current data burdens may be included.

**Power Source Disclosure Policies**

CEC is proposing modifications to the power source disclosure regulations that require utilities to create and display an annual Power Content Label. AB 1110 (2016) required CEC to consider how to incorporate “unbundled RECs” in the label and how to add an estimate of product GHG intensity to the label.

SMUD, along with other stakeholders, had significant problems with the initial proposal by CEC staff that would have required listing our 100% Greenergy product as being supplied substantially by “unspecified” power that would include fossil GHG emissions. SMUD buys Green-e Certified RECs for a majority of our Greenergy supply. The CEC proposal would require SMUD to list this portion of Greenergy power on the label as “unspecified” rather than “renewable” and show the GHG emissions expected from unspecified power. A second and third informal proposal by CEC staff did not improve much, nor did the formal regulatory language released in September.

Status: CEC released formal 45-day language regarding the power source disclosure policies in September, with little changed from the earlier informal proposals. A workshop was held on October 7, 2019 to discuss. We expect the CEC to develop revised regulatory language for adoption consideration later this year.
Delta Water and Hydro Impacts

Two substantial Delta planning processes could potentially affect energy available for SMUD’s purchase from the Central Valley Project (CVP) and flows within the Upper American River Project watershed: the Bay–Delta Water Quality Control Plan (Bay–Delta Plan), and the anticipated successor to the Delta export tunnel project. Phase 2 of the Bay–Delta Plan is ongoing and could potentially affect SMUD by increasing the volume of water required for outflow into the Bay (Phase 3 will implement Phase 2 through modifications to water rights). A substantial change in Delta outflow and tributary flow requirements could, among other things, have a major impact on the timing of hydroelectric energy generation. The State Water Resources Control Board (SWRCB) staff released a draft of one of the Phase 2 documents identifying an environmental need for significantly more outflows (in short, 35 to 75% of all water is allegedly needed for outflow with staff recommending 45 to 65%). Governor Newsom requested the SWRCB to explore negotiation of voluntary agreements with water purveyors in lieu of imposing a strict plan.

Although the two-tunnel Delta conveyance Water Fix Project was cancelled and its environmental documents rescinded earlier this year, throughout September, the Department of Water Resources (DWR) continued to prepare for the environmental review of a single tunnel solution to modernize State Water Project infrastructure. The department anticipates that the formal environmental review process will begin with the Notice of Preparation (NOP) under the California Environmental Quality Act (CEQA) later this year. Once DWR launches the new project, the risk level will resume at the same level as the original Water Fix Project. The project would involve building one or more new intakes and a tunnel to complement the historical diversion of water through the Delta channels for the State Water Project (SWP), and potentially the Central Valley Project (CVP) as well. Using the tunnels would be part of an effort to maintain or even increase Delta watershed exports to Southern and Central California. Proponents have claimed the project would help reduce the historical impacts of the South of Delta pumps on special status fish species, though modeling by Northern California interests suggests the reduced impacts have not been proven and in fact the opposite could be true. If provided by the CVP, power for the estimated 10-year construction effort and long-term operations would come out of supplies otherwise sold to public power contractors, the single largest share of which goes to SMUD under an existing long-term contract. Changes in the timing of the energy generation due to the project are as yet unclear.

Staff Comment: SMUD is working closely with a coalition of water interests to evaluate the impacts of the Bay–Delta Plan and Water Fix to understand the implications for power generation and SMUD’s water rights and hopefully agree upon a voluntary agreement substitute for a regulated process. Pressure is strong now for voluntary settlements.

Federal Legislation that Impacted SD-11

Tax Policy
As a municipal utility, SMUD relies on municipal bonds to finance infrastructure, and therefore has continued to advocate for maintaining the longstanding tax exemption for municipal bond interest. The 2017 tax reform law preserved the general exemption, but removed it for advance refunding bonds, which are used to effectively refinance an original bond. SMUD has worked individually and through coalitions like Municipal Bonds for America, the American Public Power Association, and the Alliance to Save Energy's 50X50 Commission to restore the exemption for advance refunding bonds. No major tax legislation has passed the Congress in the nearly two years since tax reform was enacted.

Additionally, Congress may soon take action on temporary tax provisions, commonly called tax extenders. Among these provisions are production and investment tax credits (PTCs and ITCs) for renewable energy technologies. While SMUD cannot directly benefit from such tax credits (because it does not have any tax liability), legislation can be designed so that municipal utilities can pass along a tax benefit to other project partners or can provide municipal utilities comparable benefits. For example, a bill by Senator Wyden (D-OR) would allow public power utilities to issue clean energy bonds as tax credit or direct payment bonds. The structure of the bond would result in a near equivalent incentive as the bill's proposed tax credits for renewable energy.

There is a growing desire on both sides of the aisle to find common ground on tax policy priorities, which could result in an end-of-year tax package. SMUD and its coalitions continue to look for opportunities to make progress on tax policy critical to the public power model.

**Pole Attachments**

Municipal utilities are exempt from federal regulation of pole attachments under Section 224 of the Federal Communications Act. However, in September 2018 the Federal Communications Commission issued a declaratory order and ruling reinterpreting other sections of the law to impose fee limits and timelines on pole attachment applications. The American Public Power Association is challenging the legality of this order, and the Northwest Public Power Association filed an amicus brief in June 2019. SMUD has expressed to its delegation concerns about this federal intrusion, noting that it has developed pole attachment agreements with telecom carriers. Rep. Anna Eshoo (D-CA) introduced legislation in January 2019 to nullify the FCC's order, and Senator Dianne Feinstein (D-CA) sponsored similar legislation in the Senate in June 2019.

**Appropriations**

Congress has not yet finalized Fiscal Year 2020 appropriations and a continuing resolution will keep the government operating at FY19 levels through Nov. 21. Both the House and Senate FY20 Energy & Water Appropriations bills include language explicitly rejecting the Trump Administration's proposal to divest transmission assets owned by the federal PMAs such as the Western Area Power Authority (WAPA).

**Spent Nuclear Fuel Removal**
Members of Congress continue to struggle to find consensus over how to resolve the longstanding political impasse over nuclear waste storage. Both the House and Senate Energy & Water FY20 appropriations bills include funding for interim storage, including a program for waste removal at permanently shut-down sites like Rancho Seco. However, the House bill does not include authorizing language and House Energy and Commerce Committee Chairman Frank Pallone (D-NJ) has advanced a bill that would open Yucca Mountain. Rep. Doris Matsui (D-CA) has urged the panel to instead advance her bill that would authorize interim storage since Speaker Nancy Pelosi (D-CA) will not allow a bill focused on Yucca Mountain to reach the House floor.

**Federal Regulatory Issues that Impacted SD-11**

**Department of Energy (DOE) and Federal Energy Regulatory Commission (FERC) Resilience Initiative**

On January 8, 2018, the FERC issued an order terminating a rulemaking in which FERC, acting at the request of the DOE, considered requiring Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) to establish full cost of service payments to “baseload” generating units with a ninety-day supply of onsite fuel storage - coal and nuclear generators - based on specific attributes those sources have that contribute to “resilience” (loosely defined as the ability to provide baseload power and endure extreme weather events). In its January 8 order, FERC acknowledged the existence of grid resilience or reliability issues due to the retirement of particular resources, and initiated a new proceeding directing each RTO/ISO to submit information concerning resilience within their respective footprints. The RTOs and ISOs have all submitted information, which FERC has yet to act upon.

The “resilience” proceedings raise questions about the efficiency of capacity markets, which SMUD has advocated against due to their incompatibility with local decision-making. In effect, the DOE and FERC efforts on resiliency represent the potential for the federal government to select winners and losers among generation resources, conflicting with not only long-established federal policy, but SMUD’s SD-11 goals as well.

SMUD, through its state and national trade associations, submitted comments in the FERC dockets to encourage determination of key terms such as “resilience” and assumptions, and to explore more fully the concept of resilience, in hopes of operationalizing a definition and addressing the problem more holistically.

**FERC Order 1000**

SMUD participates in Order 1000 regional transmission planning through WestConnect, a regional planning entity that is comprised of member transmission providers (both jurisdictional and non-jurisdictional transmission providers) with service areas consisting of all or portions of eleven states: Arizona, California, Colorado, Nebraska, New Mexico, Nevada, Utah, South Dakota, Texas, Montana, and Wyoming. WestConnect members work collaboratively to jointly plan transmission facilities, assess stakeholder and market
needs and develop cost-effective enhancements to the western wholesale electricity market.

In October of 2015, FERC accepted WestConnect’s withdrawal rights for non-jurisdictional transmission providers such as SMUD. Accordingly, if costs are allocated for particular transmission projects that are unacceptable, the non-public transmission provider has a right to withdraw from the cost allocation determination. In August 2018, El Paso Electric, a WestConnect jurisdictional transmission provider, appealed FERC’s decision in the 5th Circuit Court of Appeals. El Paso contends that a non-jurisdictional’s decision not to accept cost allocation for a project will cause free-ridership, resulting in unjust and unreasonable rates under WestConnect’s current structure. However, since December 2018, El Paso and the other jurisdictional transmission providers have received multiple grants of abeyance by the court to work with the non-jurisdictionals to develop a revised WestConnect structure that addresses the jurisdictionals’ concern. SMUD and the other non-jurisdictional transmission providers are currently in the process of working with the jurisdictionals for a resolution.

In the meantime WestConnect continues its planning process. WestConnect’s 2016-2017 transmission regional plan identified no projects for cost allocation, and WestConnect is currently conducting its 2018-2019 transmission regional plan.

**Energy Imbalance Market (EIM) and Extended Day Ahead Market (EDAM)**

SMUD has a direct interest in finding long-term solutions to the challenges posed by the integration of intermittent resources, such as wind and solar. One solution has been the development of a western EIM operated by the CAISO. In general, the EIM is a sub-hourly energy platform that automatically clears or dispatches the lowest cost electricity available to serve demand on a real-time basis.

SMUD received authorization from the BANC Commission and SMUD’s Board to participate in the EIM, and SMUD launched in spring of 2019. SMUD has successfully participated in the EIM since go-live on April 3, 2019, providing operational flexibility and financial net benefits to date.

With the support of SMUD and BANC, as well as the other EIM participants, the CAISO has launched a stakeholder initiative to develop an extension of the EIM real time framework to the CAISO’s day ahead market, referred to as the EDAM. Like EIM, EDAM would broaden the access to regional resources for the reliable integration of renewable resources, only over a longer (day ahead) time horizon. EDAM could be in place as early as 2022 and participation is voluntary.
### BOARD AGENDA ITEM

**STAFFING SUMMARY SHEET**

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<thead>
<tr>
<th>TO</th>
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<tr>
<td>1. Antiwon Jacobs</td>
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<td>10. CEO &amp; General Manager</td>
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**NARRATIVE:**

**Requested Action:** Accept the monitoring report for Strategic Direction SD-16, Information Management and Security Policy.

**Summary:** Present the 2018-2019 Board Monitoring Report for SD-16, Information Management and Security Policy.

**Board Policy:** SD-16, Information Management and Security Policy.

**Benefits:** Provide an update to the Board of Directors on the progress and status of the Information Security, Privacy and Records Management programs.

**Cost/Budgeted:** N/A

**Alternatives:** None

**Affected Parties:** SMUD

**Coordination:** IT Security

**Presenter:** Antiwon Jacobs

**Additional Links:**

**SUBJECT**

SD-16, Information Management and Security Policy 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 

FROM: 	Claire Rogers

DATE: 	November 26, 2019

SUBJECT: 	Audit Report No. 28007104
	Board Monitoring Report; SD-16: Information Management and Security

Audit and Quality Services (AQS) reviewed the SD-16 Information Management and Security 2019 Annual Board Monitoring Report and performed the following:

- Reviewed the information presented in the report to determine the possible existence of material misstatements;
- Interviewed report contributors and verified the methodology used to prepare the monitoring report; and
- Validated the reasonableness of a selection of the report's statements and assertions.

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

CC:

Arlen Orchard
1. Background

Strategic Direction Information Management and Security Policy states that:

Proper management of cyber and physical information, as well as physical security, is a core value. Robust information management and physical security practices are critical to effective risk management and to ensure regulatory compliance, business resiliency and customer satisfaction. SMUD shall take prudent and reasonable measures to accomplish the following:

a) **Information Security**: SMUD will protect customer, employee and third-party information, and SMUD information systems are protected from unauthorized access, use, disclosure, disruption, modification, or destruction.

b) **Physical Security**: SMUD will safeguard its employees while at work as well as customers and visitors at SMUD facilities. SMUD will also protect its facilities and functions that support the reliability of the electric system and overall operation of the organization from unauthorized access or disruption of business operations.

c) **Customer Privacy**: SMUD will annually notify customers about the collection, use and dissemination of sensitive and confidential customer information. Except as provided by law or for a business purpose, SMUD will not disseminate sensitive and confidential customer information to a third party for non-SMUD business purposes unless the customer first consents to the release of the information. Where sensitive and confidential information is disseminated for a business purpose, SMUD will ensure: (i) the third party has robust information practices to protect the sensitive and confidential customer information, and (ii) use of the information by the third party is limited to SMUD’s business purpose. SMUD will maintain a process that identifies the business purposes for which SMUD will collect, use and disseminate sensitive and confidential customer information.

d) **Records Management**: SMUD will maintain the efficient and systematic control of the creation, capture, identification, receipt, maintenance, use, disposition, and destruction of SMUD records, in accordance with legal requirements and Board policies.
2. Executive summary

a) The Information Security, Physical Security, Privacy, and Records and Information Management programs and initiatives align directly with the “Value Our Customers and Community” and “Operational Excellence” points on SMUD’s North Star. These programs work towards ensuring that SMUD continues to be a good steward over customer information, physical security, privacy, and records in accordance with our customers’ high expectations.

b) SMUD is substantially in compliance with SD-16 Information Management and Security Policy.

c) Summary:

<table>
<thead>
<tr>
<th>SD Requirement</th>
<th>Program/initiative/policy</th>
<th>Purpose</th>
<th>Outcome</th>
<th>Notes</th>
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<tr>
<td>Information Security: protect systems and information from unauthorized access</td>
<td>Information security program; AP 07.03.01 Information Security Concepts and Roles</td>
<td>Protect systems and information; provide policy supporting the Information Security program</td>
<td>Closed door briefing to be held in December</td>
<td>Discuss security technologies and business processes to protect information</td>
</tr>
<tr>
<td>Customer Privacy: Annually notify customers about use of information</td>
<td>Annual notice of privacy practices</td>
<td>Notify customers of our privacy practices</td>
<td>Notice sent May 2019</td>
<td>Language updated to clarify SMUD does not share data without consent</td>
</tr>
<tr>
<td>Customer Privacy: Ensure security where data is shared</td>
<td>System Security Plans and SOC 2 or SOC 3 attestation reports requirement</td>
<td>Evaluate the information practices and security controls of third parties</td>
<td>High level of confidence that vendors are using best practices to protect SMUD sensitive and confidential information</td>
<td></td>
</tr>
<tr>
<td>Customer Privacy: Maintain a process that identifies purposes for information collection and</td>
<td>Non-Disclosure Agreement (NDA) tracking application</td>
<td>Track NDAs, the data being shared, and the business justification for sharing</td>
<td>NDA tracking process is being observed and maintained</td>
<td></td>
</tr>
<tr>
<td>dissemination</td>
<td>Records Management: Identify records to ensure their integrity and authenticity</td>
<td>Records Evaluations</td>
<td>Evaluate and classify records, and document how business units manage them</td>
<td>This program is being deployed incrementally across the enterprise</td>
</tr>
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<td>---------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Records Management: Education</td>
<td>Records Custodian forum and ongoing training</td>
<td>Provide records &amp; information management training to Records Custodians and their management</td>
<td>Training has been provided and is updated and supplemented periodically, with ongoing support</td>
<td></td>
</tr>
<tr>
<td>Physical Security: safeguard employees, customers, and visitors</td>
<td>AP 06.03.01 Physical Security Anti-Tailgating Campaign and Safety Awareness Training</td>
<td>Protect SMUD employees and those who visit SMUD facilities</td>
<td>Monitor and educate employee to prevent tailgating behavior. Safety awareness training during safety briefings</td>
<td></td>
</tr>
<tr>
<td>Physical Security: protect SMUD facilities</td>
<td>AP 06.03.01 Physical Security Assessment of SMUD Physical Properties and Assets</td>
<td>Provide physical protection of SMUD campus and grid facilities through assessment and industry benchmarking to determine best practices</td>
<td>Provide enhanced safety for SMUD employees, visiting customers, and physical property assets. Create industry standard preventive measures to deter unsafe and criminal actions</td>
<td></td>
</tr>
</tbody>
</table>
3. Additional Supporting Information:

Information Security

SMUD, customer, employee and third-party information and SMUD information systems are protected from unauthorized access, use, disclosure, disruption, modification, or destruction.

A closed session information security briefing with the board will be held in December with SMUD’s new Director of Information Security.

Physical Security

SMUD will safeguard its employees while at work as well as customers and visitors at SMUD facilities.

Physical security continued their anti-tailgating campaign with increased employee education efforts. This included attending department safety training briefings, internal learning education through LMS, corporate wide communication reminders through ENN and Safety At a Glance, and New Employee Orientation (NEO). Physical security continued their observation exercises viewing employee habits when entering secured areas. The observations occurred at two facilities with high foot traffic activities, CSC and ECOC. 2018 Q1—Q4 anti-tailgating exercise data revealed improvement of employee engagement up to 92% successfully badging into secured locations. 2019 Q1-Q3 anti-tailgating exercises data showed continued improvement of employee engagement up to 94.6% successfully badging into secured locations.

Physical security relocated their dispatch control room to ECOC with updated monitoring technology. Updated CCTV replaced outdated equipment at CSC, ECOC, and FRF while newly needed monitoring locations were identified for installment of CCTV. The updates provided better monitoring of SMUD campuses and access points to detect unauthorized personnel. Physical security restructured the entire department from the traditional 8-hour shifts to a 12-hour shifts. The restructure provided increased staff availability for patrol coverage and response while creating a higher visibility of security on SMUD campuses. This restructure provided better service availability without increased staffing.

SMUD will also protect its facilities and functions that support the reliability of the electric system and overall operation of the organization from unauthorized access or disruption of business operations.

Physical security increased their availability to review, provide assessments and recommendations with security measures throughout SMUD assets. Security
assessments and recommendations were completed for UARP/Fresh Pond and substations during 2018/2019. Physical security will continue their efforts and availability to provide assessments as the utility industry standards are continuously restructured through regulatory compliance.

**Customer Privacy**

*SMUD will annually notify customers about the collection, use and dissemination of sensitive and confidential customer information.*

SMUD sent out our annual privacy notice via email and as a bill insert to customers during the May bill cycle. The notice was updated this year to more prominently feature language explaining that by default SMUD assumes we do not have permission to share personal customer data for non-SMUD business purposes. The notice is otherwise very similar to previous years and continues to include statements regarding the collection, use, and release of customer sensitive and confidential information, as well as what data is collected, SMUD’s commitment to privacy and the business purposes for which customer information is used.

*Except as provided by law or for a business purpose, SMUD will not disseminate sensitive and confidential customer information to a third party for non-SMUD business purposes unless the customer first consents to the release of the information.*

No sensitive and confidential customer information has been sent to a third party for non-SMUD business purposes this year.

*Where sensitive and confidential information is disseminated for a business purpose, SMUD will ensure: (i) the third party has robust information practices to protect the sensitive and confidential customer information, and (ii) use of the information by the third party is limited to SMUD's business purpose.*

SMUD continues to use a mandatory procurement requirement for vendors to allow the IT Security team to evaluate the security posture of a proposed vendor solution. The American Institute of CPAs (AICPA) Service Organization Control 2 (SOC 2) Type 2 is now our procurement standard as it is an independent assessment focused on a solution’s security controls which includes tests of the security controls’ efficacy. SOC 2 Type 2 reports provide staff confidence that vendor security controls are robust and sufficient to protect SMUD information. Contract and non-disclosure agreement language is used to provide assurance that SMUD provided sensitive and confidential information will not be used for any unapproved purposes.
SMUD will maintain a process that identifies the business purposes for which SMUD will collect, use and disseminate sensitive and confidential customer information.

MP 07.03.01.122 - Data Sharing requires an approved data sharing request prior to sharing information with a third party for SMUD business purposes. The request form requires the identification of the data categories to be shared and the business justification that requires the sharing of data. This facilitates an approval process which includes the requester's management, the Data Governance Program Manager, the data owner(s), and IT Security.

Records Management

The efficient and systematic control of the creation, capture, identification, receipt, maintenance, use, disposition, and destruction of SMUD records, in accordance with legal requirements and Board policies. Records Management drives compliance and improved information management supporting operation excellence. We do it right. And we innovate to improve our quality of service and lower our delivery costs.

SMUD records staff is working diligently to move SMUD toward a more highly developed records governance model, improving our compliance with existing legal requirements and Board policies. These efforts will help ensure SMUD's reputation and community standing as SMUD moves into more competitive markets that carry the risk of greater public scrutiny of records practices.

To ensure compliance, Records and Information Management will be evaluating and classifying records across the enterprise, following best practices, legal conventions, and business requirements. The effort will identify at-risk records (e.g., grid security documentation) and make recommendations to improve management practices.

Assisting in this effort are the Records Custodians, who were identified and trained in 2017. Currently one or more Records Custodians are assigned to each business unit, for a total of 50+ individuals. These Custodians help ensure we follow best practices around the management of SMUD's records. Records Custodians are supported with regular forums and training as we develop a more mature network of records & information management subject matter experts.

Next year Records and Information Management will partner with Information Technology on the deployment of solutions to continue targeting records compliance. An Office 365 Center of Excellence has been formed that will strategically align this effort.
The Information Governance Council acts as the steering committee for Records and Information Management, and prioritizes its efforts.

4. Challenges:

Physical security has continued their anti-tailgating campaign by increasing employee education efforts. Education efforts included attending department safety training briefing, internal learning education through LMS, corporate wide communication reminders, and New Employee Orientation (NEO). Physical security have also continued their observation exercises viewing employee habits when entering secured areas. The observations occurred at two facilities with high foot traffic activities, CSC and ECOC. 2018 Q1—Q4 anti-tailgating exercise data revealed improvement of employee engagement up to 92% successfully badging into secured locations. 2019 Q1-Q3 anti-tailgating exercises data showed continued improvement of employee engagement up to 96.9% successfully badging into secured locations. Physical security will continue their campaign efforts until a satisfactory 100% success is accomplished.

Physical security continued challenge of unauthorized personnel on SMUD campuses due to the open nature has not changed. In their efforts to provide a safe work environment for all SMUD employees and protection of property from unauthorized personnel, several changes occurred through updated technology and staffing restructure needed to occur. Physical security relocated their dispatch control room to ECOC with updated monitoring technology. Updated CCTV replaced outdated equipment at CSC, ECOC, and FRF while newly needed monitoring locations were identified for installment of CCTV. The updates provided better monitoring of SMUD campuses and access points to detect unauthorized personnel. Physical security restructured the entire department from the traditional 8-hour shifts to a 12-hour shifts. The restructure provided increased staff availability for patrol coverage and response while creating a higher visibility of security on SMUD campuses. This restructure provided better service availability without increased staffing.

Physical security has increased their availability to review, provide assessments and recommendations with security measures throughout SMUD assets. Security assessments and recommendations were completed for UARP/Fresh Pond and substations during 2018/2019. Physical security will continue their efforts and availability to provide assessments as the utility industry standards are continuously restructured through regulatory compliance.

As a result of an Audit and Quality Services team 2018 audit of the Privacy program, on January 9, 2019, MP 07.03.01.122 - Data Sharing was established to address fragmented information governance policies to address the increasing demand to share SMUD's data. The data sharing policy establishes accountability and integrates risk
management practices. The standalone data sharing policy under the direction the Information Governance Council calls for additional structure and oversight to the process of sharing SMUD data. Today, the Privacy and Data Governance teams have an automated data sharing request form and approval workflow to ensure no SMUD data is shared without appropriate protections considerations and management approval. IT Security and Data Governance has partnered on training sessions and an awareness campaign targeted at both leadership and staff to ensure awareness of the new process and policy.

News of breaches and cyber threats is becoming more and more common. SMUD follows Cybersecurity and Privacy best practices to prevent security incidents, but SMUD must still work to be prepared in order to respond in case we become the victim of a successful cyber-attack. Accordingly, in 2019 IT Security implemented new security technologies and business processes to keep pace with protecting information technology assets hosted on premise and externally (cloud solutions). Additionally, the Cybersecurity Program continues to mature with a commitment to structuring around the National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF). The CSF enables us to effectively manage cyber risk through various activities using both security controls built upon five core Functions: Identify, Protect, Detect, Respond, and Recover.

In 2019 Records & Information Management participated in a substantial effort to ensure the rollout of Microsoft Office 365 will be consistent with our Records & Information Management requirements. The work was performed through a new multi-department working group, called the Center of Excellence, to ensure SMUD addresses all compliance impacts from this new technology with key stakeholders including Records and Information Management. This approach will result in informed decision making, increased compliance, and reduced risks as Office 365 is rolled out across the enterprise.

5. Recommendation:

It is recommended that the Board accept the Monitoring Report for SD-16 Information Management Policy Monitoring Report.

6. Appendices:

Definitions and acronyms:
- NIST – National Institute of Standards and Technology
- CSF – Cybersecurity Framework
### BOARD AGENDA ITEM

**STAFFING SUMMARY SHEET**

**Committee Meeting & Date**
Policy, December 4, 2019

**Board Meeting Date**
December 12, 2019

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<td>Treasury and Risk Management</td>
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**NARRATIVE:**

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

**Summary:** The Enterprise Risk Management Report summarizes the activities that have occurred since the November 2018 annual report. The report includes historical risk profiles of enterprise risks which are not currently within management’s risk objectives, the 220 mitigation strategies and a current residual risk exposure status of all identified enterprise risks.

**Board Policy:** SD-17 Enterprise Risk Management. Effectively balancing and managing risk to further SMUD’s policy and business goals is a core value of SMUD. 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.

**Benefits:** SD-17 Enterprise Risk Management. Effectively balancing and managing risk to further SMUD’s policy and business goals is a core value of SMUD. 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 security, climate change, legal, legislative and regulatory, and reputational risk.

**Cost/Budgeted:** N/A

**Alternatives:** N/A

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

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

**Presenter:** Toni Hoang

**Additional Links:**

- Strategic Direction -17 Enterprise Risk Management

**ITEM NO. (FOR LEGAL USE ONLY)**

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
TO: Board of Directors
FROM: Claire Rogers
SUBJECT: Audit Report No. 28007105
        Board Monitoring Report; SD-17: Enterprise Risk Management

Audit and Quality Services (AQS) reviewed the SD-17 Enterprise Risk Management 2019 Annual Board Monitoring Report and performed the following:

- Reviewed the information presented in the report to determine the possible existence of material misstatements;
- Interviewed report contributors and verified the methodology used to prepare the monitoring report; and
- Validated the reasonableness of a selection of the report's statements and assertions.

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

CC:
Arlen Orchard
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

a) SMUD strategically manages risk to proactively reduce the chance of loss, identify and take advantage of opportunities to create greater financial stability and protect our resources to support SMUD's mission and create value for our customers.

b) SMUD is in compliance with the Board's Strategic Direction 17 (SD-17) Enterprise Risk Management.

c) SMUD continues to maintain an integrated Enterprise Risk Management (ERM) Program. The program is reviewed and updated as applicable to include new best practices to support the achievement of the Board's Strategic Directions.

SMUD's ERM program provides a framework for risk(s) to be identified, assessed, prioritized, and managed. The framework allows for the implementation of mitigations and/or action plans that are aligned with SMUD's risk appetite. The program continues to integrate risk management best practices to support decision making in key business processes.

Since the 2018 Annual Monitoring Report, staff has reviewed SMUD's portfolio of risks and provided 5 updates to the Board. The Year-on-Year Residual Risk Exposure results are summarized as follow:

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GM 19-271
Since the 2018 Annual Monitoring Report, the following enterprise risk profiles have been reduced:

Operational Risk: Headquarters Building
Operational Risk: Power Control Center
Operational Risk: Energy Assistance Program Rate (EAPR) Implementation
Operational Risk: Time-of-Date (TOD) Implementation
External Risk: Bay Delta Flow

Staff continues to implement risk mitigation strategies to balance residual risk exposures. Some risks, while medium or “yellow” are within the risk management goal. There are currently 48 risks, shown in the last two lines of the table, which are within the risk management goal.

Attachment A outlines the actions that will be taken to address risks that are not at target.

<table>
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<th>Current Residual Risk Exposure</th>
<th>Risk Management Goal</th>
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<tr>
<td>Yellow “medium”</td>
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<tr>
<td>Green “low”</td>
<td>Green “low”</td>
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SMUD’s risk exposure continues to remain moderate. Evolving technologies, the increasing pace of change in the utility business environment, skilled workforce shortages for some key skillsets, and increased legislative/regulatory requirements are key components that could impact SMUD’s risk profile in the upcoming year. Staff continues to implement initiatives to mitigate the risks appropriately.

3. Additional Supporting information:
   a) Summary of 2019 activities

   In 2019, ERM continued to support the organization with processes and methods based on best practices for risk identification, assessment, mitigation, management and communications. The overarching goal is to encourage the integration of risk-based thinking into decision-making at all levels, effectively balancing risks with opportunities.

   ERM continues to utilize three existing committees to enhance cross-functional discussion and thorough understanding of major risk issues at the executive and operational leadership team level. One of these is an executive level oversight committee, the Enterprise Risk Oversight Committee (EROC) which includes multiple
executives. The other two are the Resource Planning Coordination Committee (RPCC) and the Operational Alignment Team (OAT).

In 2019, the EROC provided a framework for the development and approval of the following:

**Local Hazard Mitigation Plan**
To support SMUD's commitment to reduce and eliminate, where possible, the potential risks and impacts of natural and human-caused hazards to SMUD's communities, system and/or operations; and to increase SMUD's access to Federal Emergency Management Agency (FEMA) grants previously not available to help fund hazard mitigation efforts, Staff prepared SMUD's first Local Hazard Mitigation Plan (LHMP). The LHMP is a five-year pre-disaster risk mitigation plan. It includes an assessment of the most significant hazards SMUD plans for in the safe operation of its electric infrastructure: including flood, dam failure, wildfire, earthquake, drought, climate change, severe weather, cyber threats, and terrorism.

The LHMP was submitted to the California Office of Emergency Services (Cal OES) and the FEMA for their review and approval. SMUD's Board adopted the LHMP on June 24, 2019 and Cal OES and FEMA approved the LHMP on July 11, 2019. Approval of the plan ensures SMUD's continued eligibility for project grants under FEMA's Hazard Mitigation Assistance programs.

**Wildfire Mitigation Plan**
Senate Bill 901 (2018) and Assembly Bill 1054 (2019) revised Public Utilities Code section 8387 to require that before January 1, 2020, and annually thereafter, every publicly-owned electric utility prepare a wildfire mitigation plan (WMP), present it in a noticed public meeting, and accept comments. Section 8387 also requires that the utility contract with a qualified independent evaluator experienced in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of the utility's WMP. The evaluator shall issue a report and present the report at a public meeting. Staff developed SMUD's WMP and it was adopted by the Board on October 17, 2019.

**Western Electricity Coordinating Council (WECC) Audit**
In 2019, Staff worked to prepare for the triennial audit from the Western Electricity Coordinating Council (WECC) for both SMUD and the Balancing Authority of Northern California (BANC). In September WECC conducted a focused review of documentation spanning the last three years of our operations to determine SMUD's compliance with the Federal Energy Regulatory Commission (FERC) reliability standards that ensure the reliability and security of the bulk electric system during this period. We are still awaiting the final report but expect positive results other than two minor potential non-compliance documentation issues.

**Cyber Security**
SMUD's Cybersecurity Program continues to mature with a renewed commitment to structuring our program and activities around the standards provided by the National
Institute of Standards and Technology (NIST). The new Director of IT Security has aligned the Cybersecurity Program with the NIST Cybersecurity Framework (CSF) to effectively manage cyber risk through various activities using both security controls built upon the NIST CSF five core functions of Identify, Protect, Detect, Respond, and Recover. The capabilities and services provided by IT Security are focused on maintaining and improving our security posture and the resiliency of our infrastructure.

Risk exposure monitoring and continuous updates: Staff continues to monitor and update the changes in existing and emerging risks and their impacts to residual risk. In addition, audit results and management responses are considered in the ERM assessment plan and reporting process. The audit plans are linked with the enterprise risk assessments to provide assurance that mitigation measures for critical risks are being implemented effectively and in a timely manner.

- Since November 2018, 17 audit reports were reviewed by the ERM Office and none resulted in a change to the risk profile.

Noteworthy enterprise risk profile changes are included in regular Board reporting.

- Attachment A summarizes the “Year-on-Year Profile Changes,” for the all enterprise risks currently not within risk management goal. The attachment includes year-on-year changes, current “risk trend,” and actions staff is taking to reach the “target”; which could be either low “green” or medium “yellow.”

b) Benchmarking: Staff reviews available enterprise risk related information and incorporates new risk issues and/or expand existing risk issues where appropriate. North Carolina State University’s (NCSU) Enterprise Risk Management Initiative and Protiviti continue to jointly publish benchmark information. The joint study, Executive Perspectives on Top Risks for 2019, provides insight from 825 global board members and executives from across several industries to determine the top risks for 2019. The study found that for 2019, most leaders were concerned with their organizations’ ability to “transform their operations and infrastructure so they can compete with organizations that are born digital.” Succession challenges and heightened regulatory scrutiny are also pressing concerns. Overall, the top ten identified enterprise risk issues across the surveyed organizations and those specific to the Energy and Utility Industry (Utility Industry) and its trend analysis is consistent with SMUD’s identified enterprise risks.

An analysis of SMUD’s enterprise risks as compared to the top 10 enterprise risks identified by the study is outlined in Attachment B.

c) Looking forward

In 2020, Staff will continue to enhance the enterprise risk management program, the following initiatives have been planned:
• Third party assessment of the ERM program to identify areas of improvement.
• Mitigation plans for high risks identified in the enterprise risk register shall continue to be monitored closely to ensure risks are managed appropriately.
• Continue to:
  - Leverage new tools to support SMUD's ability to model financial impacts of trends and/or shocks in revenue, O&M, and capital spending.
  - Support key suppliers and vendor risk management
  - Enhance SMUD's enterprise continuity management planning
  - Improve safety performance to meet SD-6 Safety DART goal of 1.4 by 2020
  - Positively influence state and federal legislative/regulatory issues
  - Attract and retain a skilled and innovative workforce
  - Provide programs and services which reflect the customer's changing expectations
  - Make progress in strengthening aging infrastructures
  - Enhance data quantity and quality for business and customer decisions
  - Continue cyber security and privacy awareness and compliance activities
  - Improve upon current physical security and public safety practices
  - Increase alignment between costs and revenue collection in SMUD's rate design
  - Develop, evaluate, and deploy technology and new business models to maximize shared value for the utility and the customer

4. **Challenges:** Challenges to managing risk has always been the delicate balance between taking on risks in pursuit of opportunities. By leveraging the ERM framework and existing data analytics tools, Staff can better manage risks as a portfolio, rather than in silos. This leads to increased awareness of our risks, the level-setting of risk tolerance across the enterprise, efficiencies in mitigation efforts as well as potential cost savings.

5. **Recommendation:** It is recommended that the Board accept the Monitoring Report for SD-17 Enterprise Risk Management.
### Enterprise Risk Mitigations for Risks Currently not within Target

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Risk Description</th>
<th>Year on Year Profile</th>
<th>Risk Trend</th>
<th>Target</th>
<th>2020 Risk Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial</strong></td>
<td>Load variation: customer owned generation</td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td>The Board recently adopted a new Integrated Resource Plan, calling for investments in electrification, in addition to customers seeking greater investments in customer-sited distributed energy resources such as rooftop solar and storage. SMUD will continue monitor trends which will impact daily, seasonal and annual load variations.</td>
</tr>
<tr>
<td></td>
<td>Project execution</td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td>Work on the new Project Portfolio Management solution is in progress with a go live date that supports the annual project process for the 2021 budget. Staff continues to work on optimizing the Enterprise Project Management Process through streamlining information being collected across the different project phases, and the how project data is used in reporting. Operational Alignment Team (OAT) meeting discussions have focused on ensuring budget offsets are identified for projects with increased costs. They have also encouraged greater accountability for Enterprise Project Closeout and Benefits Realization document submission.</td>
</tr>
<tr>
<td><strong>Operational: People</strong></td>
<td>Employee safety</td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td>SMUD continues to work toward a zero-incident safety culture and integrate a &quot;Be Safe. Always&quot; philosophy in the development and implementation of work practices to protect our employees, contractors and the public. We’re on track to meet the Board DART (Days Away, Restricted Time or Job Transferred) rate target of 1.4 by 2020. As we move into 2020, staff will continue to evaluate methods to reduce risks to our employees, contractors, and the community. Key initiatives planned for 2020 to reduce overall safety risks include the following: Developing increased program support to further foster SMUD Leadership engagement with safety, create new and more meaningful channels for employees to be involved with elements of the safety program, increased frequency of contractor safety field inspections, more frequent safety messaging to the community. In addition, the evaluation of a safety management system software solution is being implemented that will positively impact SMUD operations and provide increased access / visibility to safety key metrics.</td>
</tr>
<tr>
<td></td>
<td>Strategic workforce agility</td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
<td>Succession planning commenced in 2019 for director-level roles to further the work done at the executive level in 2018. By the end of 2019, all director roles will have completed assessments on the readiness level for managers and supervisors throughout the organization. These assessments will inform actionable items, such as development of staff, to be initiated in 2020. While having executive and senior leadership roles assessed for gaps in readiness decreases SMUD's risk, there are other critical roles</td>
</tr>
</tbody>
</table>
In 2019, IT Security reorganized and restructured service and capabilities to align to the NIST Cybersecurity Framework (CSF) to protect our people, processes, and technology through an organization-wide risk management approach. Current capabilities and services include: cybersecurity program management, governance, risk & compliance, security engineering, information asset security, energy operations & incident management command centers, security operations center, identity management, application security and personal & external relationships.

In 2019, to improve our risk posture and support resiliency, our first line of defense, IT Security Operations:

1. Deployed an endpoint detection and response (EDR) solution - Deployed an EDR solution across the enterprise which greatly enhanced our ability to detect and prevent malicious activity by utilizing cloud powered machine learning to examine the activity on our endpoints and compare those to tactics and techniques that are utilized by our adversaries. As part of this deployment, we also established a relationship with a Managed Security Services Provider (MSSP) to respond to detection and prevention events year-round, 24 hours a day.

2. Deployed a new web filtering solution - Deployed a new web filtering solution that prevents malicious and unapproved traffic from traversing our network to the internet. This solution gave SMUD visibility into all traffic, not a subset of traffic as we had previously, gave us the ability to decrypt secure socket layers (SSL) sessions to increase visibility, and gave us the ability to provide this capability to on premises and roaming endpoints.

3. Deployed a vulnerability management system - Security Operations provided an enterprise grade vulnerability management solution that allows us to identify risks within our technical infrastructure and trend those risks and the remediation of them over time.

Lastly, the Cybersecurity team played a key role in enabling SMUD to receive a clean NERC Critical Infrastructure Protection (CIP) regulatory audit in 2019. IT Security is introducing an enterprise goal in 2020 to pilot the use of the NIST Risk Management Framework (RMF) to allow SMUD to more consistently assess the cybersecurity risk levels of our systems and...
# Enterprise Risk Mitigations for Risks Currently not within Target

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Risk</th>
<th>Year on Year Profile</th>
<th>Risk Trend</th>
<th>Target</th>
<th>2020 Risk Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>appropriately distribute risk ownership to system owners throughout the organization.</td>
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<tr>
<td></td>
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<td></td>
<td>Privacy-focused legislation continues to be a focus at the state level, resulting in updates to the California Consumer Privacy Act (CCPA) and continued customer interest in their ability to control their personal data. SMUD's Data Sharing Policy and the associated data sharing request process were created to stay ahead of these concerns and allow the organization to respond to CCPA requests regarding the data we have for our customers as well as requests to disclose the parties with whom we have shared their data. The new level of transparency required by the CCPA could mean additional scrutiny of our business processes related to the collection, use, and retention of personal data.</td>
</tr>
<tr>
<td>Data governance</td>
<td></td>
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<td>In 2019, staff collaborated with other teams to refine the data categorization processes by incorporating the National Institute of Standards and Technology (NIST) standards as a baseline to work up from and fostered data accountability through further expansion of a centralized data sharing process. In 2020, staff will continue to expand the data sets to be categorized and incorporate the accountability established through the data domains and categories into core business processes. In addition, this will support other 2020 risk mitigation initiatives.</td>
</tr>
<tr>
<td>Enterprise-wide documentation</td>
<td></td>
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<td></td>
<td>Records and Information Management (RIM) will continue to complete records evaluations across the enterprise throughout 2020. Staff will complete the substantial multi-year effort to move information from Grid Assets into a new document management and storage system to ensure compliance with federal and state standards. Collaboration with Information Technology’s (IT) document software team will continue to increase and become more procedural. RIM will acquire a new program to enhance document management capabilities. RIM will onboard a new tool (Gimmel) to maximize the efficiency and consistency in records management and ensure document destruction capability.</td>
</tr>
<tr>
<td>Operational: Process</td>
<td>Gas &amp; gas pipeline assets</td>
<td></td>
<td></td>
<td></td>
<td>In 2020, staff will remain vigilantly focused on safety. SMUD will be working with first responders and outside agencies to exercise emergency response plans to develop relationships with the community and improve response</td>
</tr>
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</table>
## Enterprise Risk Mitigations for Risks Currently not within Target

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Enterprise continuity management</td>
<td></td>
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<td></td>
<td>In 2020, Staff will continue to analyze the results of 2018’s full Internal Line Inspection (ILI) of the entire pipeline system.</td>
</tr>
<tr>
<td>Internal communications and alignment</td>
<td></td>
<td></td>
<td></td>
<td>In 2019, staff developed and implemented the Enterprise Continuity Management Program (ECMP) which integrates four disciplines: business continuity, disaster recovery, crisis communications and emergency preparedness. The integration of the four disciplines into one program helps to increase efficiencies and bridge communications and coordination.</td>
</tr>
<tr>
<td>Internal communications and alignment</td>
<td></td>
<td></td>
<td></td>
<td>In 2020, staff will review and update the Emergency Operations Center (EOC) Operating Procedures including organizational structure, policies, roles &amp; responsibilities.</td>
</tr>
<tr>
<td>Internal communications and alignment</td>
<td></td>
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<td></td>
<td>Thirty-three groups/teams have been trained using the Emergenetics tool with a focus on increasing communication and appreciation for other thinking styles ultimately leading to more inclusive communications. The most recent culture pulse assessment conducted late 2018 pointed to three main areas of opportunity. The first, related to improving the effectiveness of meetings, resulted in senior leaders adopting clear expectations around meeting effectiveness. The second was related to increasing employee recognition - specifically increasing recognition from senior and executive leaders. Leaders across the enterprise are submitting commitment items from the 2019 pulse survey, many of which will be actionable behaviors to align &amp; improve communications.</td>
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<tr>
<td>Energy management center (EMC)</td>
<td></td>
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<td></td>
<td>The Energy Management Center building is a critical operation for SMUD. Facilities continues to implement projects to address inefficiencies in the building without impacting business operations – the projects have included electrical as well as mechanical fixes that have greatly reduced the overall risk to the facility. Staff has created a playbook for potential issues and prepositioned both replacement parts and established contracts to counter any potential failure – Staff will continue to monitor changes and look for ways to reduce risk to core business functions or refine failure response plans as needed.</td>
</tr>
<tr>
<td>Physical asset security</td>
<td></td>
<td></td>
<td></td>
<td>In 2019, Staff has fully implemented the Low-Impact Security requirements for SMUD. Penetration testing that took place in 2019 revealed that SMUD Security Operations has effective processes and personnel in place to protect SMUD and its employees.</td>
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</table>
### Enterprise Risk Mitigations for Risks Currently not within Target

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</thead>
<tbody>
<tr>
<td>Transmission and distribution substation assets</td>
<td><img src="progress.png" alt="Progress" /></td>
<td><img src="progress.png" alt="Progress" /></td>
<td><img src="progress.png" alt="Progress" /></td>
<td>In 2019 conversion to digital security cameras was completed on all campuses. The technology includes movement tracking and low light vision. In 2020, Staff will continue to identify gaps in physical and campus security and will recommend protection measures for 2020-2021 implementation. Multi-year replacement plan for T&amp;D substation assets, including circuit breakers, transformers and switchgear is now in place and part of the maintenance planning process. Critical assets were identified for replacement, designs have been completed and execution of these plans are moving forward. This will be an on-going process to maintain our assets.</td>
</tr>
<tr>
<td>Operational excellence</td>
<td><img src="progress.png" alt="Progress" /></td>
<td><img src="progress.png" alt="Progress" /></td>
<td><img src="progress.png" alt="Progress" /></td>
<td>In 2019, Staff rolled out training and trained people on operational excellence (OpEx). Attendees of the training have done operational excellence initiatives in their organizations. In 2020, Staff will continue to identify and implement operational efficiencies to help offset future rate increases.</td>
</tr>
<tr>
<td>Pricing rate design implementation</td>
<td><img src="progress.png" alt="Progress" /></td>
<td><img src="progress.png" alt="Progress" /></td>
<td><img src="progress.png" alt="Progress" /></td>
<td>The 2019 rate process included both Net Energy Metering (NEM) 2 and commercial restructure. The NEM proposal was removed from the rate process and Staff is embarking on a public process for NEM 2. Staff announced its plan and has begun an extensive public process to develop a new NEM rate structure (NEM2) for customers with on-site generation, such as solar. An important part of this process is using the best available science and input from a wide range of leading experts, local stakeholders and SMUD customers to develop a comprehensive analysis of the costs and benefits of customer-sited self-generation systems. Among the participants are rooftop solar advocates, rooftop solar customer representatives, environmental advocates, academics and low-income customer representatives. SMUD's goal is to design a new NEM structure that balances the need for continued reliability of its grid and electric service and rate equity for all customers, while meeting its aggressive carbon reduction goals to support California's bold vision for a clean and sustainable future. Within this process, SMUD is committed to maintaining low rates for all our customers.</td>
</tr>
</tbody>
</table>
Commercial rate restructure was approved by the Board, with an up to 8-year transition period for customers. This restructure addressed three major issues—

1. Adjust SMUD's commercial class time periods to more accurately reflect the cost to provide power to customers.
2. Re-align rates to ensure sufficient collection of fixed costs to supply energy to all customers.
3. Improve consistency in bill components (SIFC, SIC Demand Charge, Summer Super Peak Demand Charge and per kWh energy charges) across the rate classes.

The detailed project planning is underway and scheduled to be complete in November. Project work in 2020 will focus on developing and implementing the technology to implement the new rates and preparing for the 2021 transition of customers to the new rates.

Maintenance Planning Staff is currently working with Information Technology (IT) to leverage the capabilities in SAP for maintenance plans for 2020 substation inspections (GO174 process). For line assets, staff is currently working with IT to update the SAP/GIS integration to capture equipment attributes in the correct fields/tables within SAP so that time-based maintenance plans can be used for line assets (GO165 process). Update to the SAP/GIS interface is planned for 2020.

In 2019, staff worked to prepare for the triennial audit from the Western Electricity Coordinating Council (WECC). In September WECC conducted a focused review of documentation spanning the last three years of our operations to determine SMUD's compliance with the Federal Energy Regulatory Commission (FERC) standards that ensure the reliability and security of the bulk electric system during this period. The standards include operation, planning, modeling, protection, tree trimming, facility rating and the physical and cyber security measures applied to assets critical to grid operations. WECC auditors reviewed SMUD subject matter expert's (SME's) documentation and evidence, the SME's were also interviewed, and WECC toured SMUD facilities.
<table>
<thead>
<tr>
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</thead>
</table>
|                |                             | 2017 | 2018 | 2019 |                                                                 | We are still awaiting the final report but expect positive results other than two minor potential non-compliance documentation issues.  
Before the audit, Staff did extensive preparation. These activities included leveraging the newly-implemented Internal Controls Program (ICE) to identify and evaluate risks to reliability and security and conduct in depth mock audits of the critical infrastructure protection (CIP) and operations (OPS) standards.  
In 2020, staff will continue to execute the ICE program for both OPS and CIP reliability standards.                                                                                                          |
| Meter to cash  |                             |          |      |      |                                                                 | We continue to refine billing exception processes given the addition of more complex billing with Time of Day (TOD). We will complete the transition of remaining customer to TOD or fixed rate offerings by the end of Q4 2019.  
We anticipate that the risk trend for meter to cash in 2020 will decrease.                                                                                                                                 |
| Supply chain   |                             |          |      |      |                                                                 | Staff has started quarterly business reviews for critical material and equipment suppliers; those categories include: meters, transformers, poles, cable, and underground utility infrastructure. Metric reporting will focus on supplier performance based on the key performance indicators in our contracts and include open discussions with management from SMUD and the supplier. |
| Energy efficiency |                            |          |      |      |                                                                 | SMUD has been working with the Statewide Technical Working Group (which includes members from CEC, CPUC, and CARB to name a few) on methodologies for counting building electrification towards energy efficiency per SB 350. Given SMUD's new IRP goals and the implementation plan leveraging building electrification, SMUD's equivalent energy efficiency savings will far exceed the "doubling" concept. |
| Strategic      | Innovation                  |          |      |      |                                                                 | SMUD continues to innovate and has several initiatives that help support continuing to innovate in the face of rapid change in our industry. The Energy Strategy Research & Development team is focusing its strategy update to align with the outcomes from the most recent IRP; the California Mobility Center has been created and is recruiting participants and funders, and the general efforts of SMUD resulted in being recognized in 2019 by the Sacramento Business Journal as Innovator of the Year. |
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<tbody>
<tr>
<td></td>
<td><strong>Changing customer expectations</strong></td>
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<td></td>
<td>In 2020, Staff will continue to improve self-service tools for SMUD customers and have proposed several customer-facing and back office system enhancements that are expected to improve operational efficiencies to better meet customer needs. Staff intend to launch new products and services to meet customer needs, while continuing to incrementally improve current products and services.</td>
</tr>
<tr>
<td></td>
<td><strong>Competitive workforce total rewards</strong></td>
<td></td>
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<td></td>
<td>Human Resource Diversity &amp; Inclusion strives to continually increase employee awareness of the impact of actions on benefit costs. In 2020, staff will continue to increase communication to employees/plan participants and assess other benefit options to meet the needs of a diverse /multi-generation employee and retiree population. Changes to the deferred compensation programs will be communicated and rolled out to employee and retiree participants.</td>
</tr>
<tr>
<td></td>
<td><strong>Renewable portfolio standards (RPS)</strong></td>
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<td>SB100 (2018) accelerated the previous 50% RPS (SB 350) goal from 2030 to 2027 and establishes a new RPS benchmark of 60% by 2030. SMUD has incorporated the requirements of SB100 into the most recent Integrated Resource Plan (IRP) and is prepared to achieve the new RPS standards. The 2020 budget funds investments in new solar, development of new wind, continued local solar and battery storage site exploration as well as investments in new technology for increased operational visibility into new distributed energy resources.</td>
</tr>
<tr>
<td></td>
<td><strong>Economic business agility</strong></td>
<td></td>
<td></td>
<td></td>
<td>The economic development rate &amp; development fee credits was approved by the Board in 2018 and has now been used once. Staff will be monitoring the value of these measures. The 2020 budget came in essentially at rate case (except for projects with time shifts). Work has begun on a 10-year forecasting model, which will help to plan for change.</td>
</tr>
<tr>
<td></td>
<td><strong>External</strong></td>
<td></td>
<td></td>
<td></td>
<td>SMUD's IRP was filed with the CEC in April 2019. In August 2019, the CEC released their staff report which found that SMUD's IRP met all the regulatory requirements. Formal CEC approval of SMUD's IRP will be made during their December 2019 business meeting.</td>
</tr>
<tr>
<td></td>
<td><strong>CEC: Integrated resource planning (IRP)</strong></td>
<td></td>
<td></td>
<td></td>
<td>Former Governor Brown signed AB 398 in 2017 that reauthorizes the State's Cap and Trade program. This was then adopted by the Air Resources Board. This package provides allowance allocation security to SMUD</td>
</tr>
</tbody>
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<tbody>
<tr>
<td></td>
<td>Wildfire</td>
<td>2017</td>
<td>2018</td>
<td>2019</td>
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</tr>
</tbody>
</table>

In 2019, Staff developed a Wildfire Mitigation Plan (WMP) in accordance with the requirements outlined in Senate Bill 901 (2018) and Assembly Bill 1054 (2019). The WMP process included extensive public outreach, evaluation of the comprehensiveness of the WMP by a qualified independent evaluator (QIE), and presentation of the WMP and QIE report to the Board in a noticed public meeting. The WMP was adopted by the Board on October 17, 2019. The WMP outlines existing and additional wildfire mitigation activities for SMUD. These activities include increased vegetation management and situational awareness tools to name a few.

In 2020, Staff will work on implementing new wildfire mitigation activities as well as achieving the goals outlined in the WMP. In addition, Staff will continue to review and update the WMP as required.
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.

<table>
<thead>
<tr>
<th>North Carolina State ERM Initiative and Protiviti Top 10 Enterprise Risks</th>
<th>SMUD's Corresponding Risks</th>
<th>SMUD's Current Residual Risk Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specific to Energy and Utilities Industry</strong></td>
<td><strong>Strategic risk:</strong> Strategic workforce agility Operational excellence Innovation</td>
<td>The current residual risk exposure ranges from medium to high</td>
</tr>
<tr>
<td>1 Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered.</td>
<td><strong>External risk:</strong> legislative/regulatory CEC: Integrated Resource Planning Wildfire</td>
<td></td>
</tr>
<tr>
<td>2 Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations.</td>
<td><strong>Operational risk:</strong> Cyber security Privacy</td>
<td></td>
</tr>
<tr>
<td>3 Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand.</td>
<td><strong>Operational risk:</strong> Cyber security Privacy</td>
<td></td>
</tr>
<tr>
<td>4 Our organization's culture may not sufficiently encourage the timely identification and escalation of risk issues that have the potential to significantly affect our core operations and achievement of strategic objectives.</td>
<td><strong>Operational risk:</strong> Strategic workforce agility Corporate governance</td>
<td></td>
</tr>
<tr>
<td>5 Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization.</td>
<td><strong>Strategic:</strong> Business agility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOP 10 ENTERPRISE RISKS COMPARED TO SMUD'S ENTERPRISE RISK CATEGORIES Specific to Energy and Utilities Industry</td>
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| 6 | Rapid speed of disruptive innovations enabled by new and emerging technologies and/or other market forces may outpace our organization's ability to compete and/or manage the risk appropriately, without making significant changes to our business model. | Operational risk: Grid operational systems and supports  
Strategic risk: Innovation  
Business agility |
| 7 | Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation. | Operational risk: Enterprise Continuity Management  
Media & Community Relations |
| 8 | Our existing operations and legacy IT infrastructure may not be able to meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are “born digital” and with a low-cost base for their operations, or established competitors with superior operations. | Operational risk: Technology system infrastructure  
Grid operational system & support  
Strategic risk: Innovation  
Business agility |
| 9 | Inability to utilize data analytics and “big data” to achieve market intelligence and increase productivity and efficiency may significantly affect our management of core operations and strategic plans. | Operational risk: Data governance  
Data availability |
| 10 | Our organization’s succession challenges and ability to attract and retain top talent may limit our ability to achieve operational targets. | Operational risk: Strategic workforce agility  
Competitive Workforce Total Rewards |
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<td>1. Laurie Rodriguez</td>
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**Consent Calendar**

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**FROM (IPR)**

- Laura Lewis
  - Office of the General Counsel

**MAIL STOP**

- B308

**EXT.**

- 6123

**DATE SENT**

- 11/18/19

**NARRATIVE:**

**Requested Action:** Approve proposed revisions to Governance Process GP-12, Board Compensation and Benefits.

**Summary:** California Government Code section 53232.2(b) provides that Board members may be reimbursed for specified occurrences of expenses as defined in a written policy, including "other actual and necessary expenses" in addition to travel, meals, and lodging. California Government Code section 53232.2(f) further provides that "all expenses that do not fall within the adopted travel reimbursement policy or the Internal Revenue Service reimbursable rates... shall be approved by the governing body, in a public meeting before the expense is incurred..."

SMUD Governance Process 12 (GP-12) currently does not address reimbursement for technology and computer-related expenses. Staff recommends a modification to GP-12 to allow for future reimbursement of these expenses pursuant to reimbursement policies applicable to executive and senior leaders. The reimbursement request will be subject to the requirement for pre-approval in a public meeting and subsequent proof of purchase for reimbursement. A redline copy of the proposed revision to GP-12, Board Compensation and Benefits is attached.

**Board Policy:** GP-3, Board Job Description – Subsection j) Take such other actions as may be required by law.; GP-12, Board Compensation and Benefits.

**Benefits:** Enables Board Members to review the policy to appropriately allow for reimbursement of other actual and necessary expenses not currently covered by policy or processes.

**Cost/Budgeted:** N/A

**Alternatives:** Maintain the existing policy.

**Affected Parties:** Board Members

**Coordination:** Human Resources, Diversity & Inclusion, Legal, Board Office

**Presenter:** Laurie Rodriguez, Director, Human Resources, Diversity & Inclusion

**Additional Links:**

- Revisions to Governance Process 12 (GP-12), 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 shall 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, conferences and organized educational activities, the sum of $275.00 per day of service. No director shall receive compensation for more than ten (10) days in any one calendar month. Campaign and political meetings, events, and fundraisers are not compensable under this policy.

b) Each Board member shall 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.

b) 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.

c) Compensation forms shall be completed by a Director and distributed by the Board office for review and approval prior to a Board meeting. The Board shall review and approve compensation and any request for technology reimbursement at each regular Board meeting. Board member compensation, along with any requests for technology reimbursement, shall be placed on the consent calendar at each regular Board meeting, unless a Board member requests that it be placed on the discussion calendar. Expense reimbursement forms and requests for expenditures for travel and training shall be completed by a Director and submitted to the Board President or Vice President for approval as appropriate.

d) 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.

Monitoring Method: Board Report
Frequency: Annual
NARRATIVE:

Requested Action: Allow the Board Members an opportunity to discuss committee plans for 2020 including membership and chairs.

Summary: This discussion will cover appointments for the four Board committees including chairs, vice chairs, and member and the SMUD - Sacramento Tree Foundation 2 x 2 representatives.

Board Policy: This discussion supports GP-6 Role of the Board President which states that the Board President will appoint committee chairs and members of standing committees.

Benefits: This discussion will prepare the Board’s committee structure and memberships for the upcoming year.

Cost/Budgeted: N/A

Alternatives: Not select new chairs or members for the committees at this time.

Affected Parties: Board of Directors

Coordination: Donna Lofton

Presenter: Rob Kerth, Board Vice President

Additional Links:
**NARRATIVE:**

**Requested Action:**
Allow the Board of Directors an opportunity to discuss committee topics they would like to have agendized on the 2020 Work Plan.

**Summary:**
The Board will brainstorm committee topics they would like to have on the 2020 Board Work Plan.

**Board Policy:**
GP-4 Agenda Planning states that in December each year the Board will develop a list of topics and issues that it wishes to explore in the coming year. This committee topics discussion supports this governance process.

**Benefits:**
Having an opportunity to hear which agenda topics the Directors would like to have on the 2020 Work Plan will help staff prepare agendas that are relevant and in line with the Directors’ preferences.

**Cost/Budgeted:**
N/A

**Alternatives:**
Not discuss committee topics at this time.

**Affected Parties:**
Board of Directors

**Coordination:**
Donna Lofton

**Presenter:**
Rob Kerth, Board Vice President
## BOARD AGENDA ITEM

### STAFFING SUMMARY SHEET

#### POLICY 2019

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**MAIL STOP**: A310  5079  1/7/19

### 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 GP-6 Role of the Board President which states that the Board President shall give progress reports on the Board’s 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:** N/A

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

**Affected Parties:** Board and Executive staff

**Coordination:** Donna Lofton

**Presenter:** Dave Tamayo, Board President

### Additional Links:

**SUBJECT**

Board Work Plan
## BOARD AGENDA ITEM

**STAFFING SUMMARY SHEET**

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### Consent Calendar

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### NARRATIVE:

**Requested Action:** Committee discussion and consensus on any directives provided to staff during the Committee meeting.

**Summary:** Wrap up period at the end of each committee meeting to summarize various Board member suggestions and requests that were made at the meeting in an effort to make clear the will of the Board. Policy Committee Chair, Heidi Sanborn, will summarize Board member requests that come out of the committee presentations for this meeting.

**Board Policy:** GP-4, Agenda Planning states the Board will focus 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:** N/A

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

**Affected Parties:**
- Board of Directors and Executive Staff
- Donna Lofton, Special Assistant to the Board

**Presenter:** Heidi Sanborn, Chair, Policy Committee

### Additional Links:

**SUBJECT**

Summary of Committee Direction

**ITEM NO. (FOR LEGAL USE ONLY)**

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.