Board Policy Committee
Meeting and Special SMUD
Board of Directors Meeting

Date: Wednesday, February 12, 2020
Time: Scheduled to begin at 5:30 p.m.

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

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

Wednesday, February 12, 2020
SMUD Headquarters Auditorium
6201 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. Jennifer Restivo  
   Accept the monitoring report for Strategic Direction SD-2, Competitive Rates.  
   Presentation: 10 minutes  
   Discussion: 10 minutes

2. Russell Mills  
   Accept the monitoring report to Strategic Direction SD-3, Access to Credit Markets.  
   Presentation: 5 minutes  
   Discussion: 5 minutes

3. Bill Boyce  
   Approve SMUD's participation in the statewide Low Carbon Fuel Standard (LCFS) Clean Fuel Reward Program.  
   Presentation: 10 minutes  
   Discussion: 10 minutes

INFORMATIONAL ITEMS

4. Rob Kerth  
   Board Work Plan.  
   Discussion: 5 minutes

5. Public Comment

6. Heidi Sanborn  
   Summary of Committee Direction.  
   Discussion: 1 minute
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 Headquarters Building, 6201 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.
### BOARD AGENDA ITEM
STAFFING SUMMARY SHEET

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**TO**

1. Jennifer Davidson
2. Nicole Howard
3. Paul Lau
4. 
5. 
6. 
7. 
8. 
9. Legal
10. CEO & General Manager

<table>
<thead>
<tr>
<th>Consent Calendar</th>
<th>x</th>
<th>Yes</th>
<th>No (If no, schedule a dry run presentation)</th>
<th>Budgeted</th>
<th>x</th>
<th>Yes</th>
<th>No (If no, explain in Cost/Budgeted section)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FROM (IPR)</td>
<td>Jennifer Restivo</td>
<td>Planning, Pricing &amp; Enterprise Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAIL STOP B356</td>
<td>EXT. 5193</td>
<td></td>
<td></td>
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</table>

**NARRATIVE:**

Requested Action: Accept the monitoring report for Strategic Direction SD-2, Competitive Rates.

Summary: As of December 31, 2019, SMUD is in compliance with the SD-2 Competitive Rates, continuing to have rates at least 18 percent below Pacific Gas & Electric Company’s (PG&E’s) system average rates and at least 10 percent below PG&E’s published average rates for each customer class. As of December 31, 2019, SMUD’s EAPR & EAPR/MED programs were 32.2 percent below PG&E’s published California Alternate Rates for Energy (CARE) program.

Board Policy: SD-2, Competitive Rates

Benefits: As of December 31, 2019, SMUD system average rates are 36.5 percent below PG&E’s system average rates.

Cost/Budgeted: n/a

Alternatives: n/a

Affected Parties: n/a

Coordination: Planning, Pricing & Enterprise Performance

Presenter: Jennifer Restivo

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**SUBJECT**

Accept SD-2 Monitoring Report

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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
TO: Board of Directors
FROM: Claire Rogers
SUBJECT: Audit Report No. 28007180
Board Monitoring Report; SD-02: Competitive Rates

Audit and Quality Services (AQS) reviewed the SD-02 Competitive Rates 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 course of 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 2, Competitive Rates states that:

Maintaining competitive rates is a core value of SMUD.

Therefore:

a) The Board establishes a rate target of 18 percent below Pacific Gas & Electric Company’s published rates on a system average basis. In addition, the Board establishes a rate target of at least 10 percent below PG&E’s published rates for each customer class.

b) SMUD’s rate of change for both rates and bills shall be competitive with other local utilities on a system average basis.

c) In addition, SMUD’s rates shall be designed to balance and achieve the following goals:

   i) Reflect the cost of energy when it is used;
   
   ii) Reduce use on peak;
   
   iii) Encourage energy efficiency and conservation;
   
   iv) Minimize “sticker” shock in the transition from one rate design to another;
   
   v) Offer flexibility and options;
   
   vi) Be simple and easy to understand;
   
   vii) Meet the needs of people with fixed low incomes and severe medical conditions; and
   
   viii) Equitably allocate costs across and within customer classes.

2. **Executive summary**

   **a) SMUD is in compliance with SD-2, Competitive Rates.**

   As of December 31, 2019, SMUD’s rates remain among the lowest in the state and on a system average rate basis are 36.5% below Pacific Gas & Electric
(PG&E) Company's, which is better than the SD-2 target of at least 18% below on a system average rate basis. Residential average rates are at least 32.2% below PG&E's residential average rates. See figure 1 for details.

There was no rate increase to SMUD's residential rates in 2019. Rates for all non-residential customers were increased by 1% in 2019 per Board adopted rate changes on June 15, 2017. The overall rate advantage between SMUD and PG&E remains well above the SD-2 target of at least 18% on a system average basis.

<table>
<thead>
<tr>
<th>Metric</th>
<th>2019 performance</th>
<th>2018 performance</th>
<th>5-year average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD-2, Competitive Rates requires</td>
<td>36.5% below PG&amp;E</td>
<td>33.4% below PG&amp;E</td>
<td>31.4% below PG&amp;E</td>
</tr>
<tr>
<td>system average rates 18% below</td>
<td>on a system average rate basis</td>
<td>on a system average rate basis</td>
<td>on a system average rate basis</td>
</tr>
<tr>
<td>PG&amp;E rates</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The new standard residential Time-of-Day (TOD) rate and alternative fixed rate went into effect in late 2018, with the full rollout completed in November 2019. The restructuring of the Energy Assistance Program Rate (EAPR) began in 2019 and will end in 2021. The restructuring of the EAPR rate modified the discount to be based on the customer's income as a percentage of the federal poverty level, rather than a straight percentage discount on the bill. This change provides a higher discount to the low-income customers who are most in need. The EAPR customer population was transitioned to the new structure as of the end of 2019.

As of December 31, 2019, all customers have transitioned to TOD, with only 2% of customers choosing the alternative fixed rate. Similarly, less than 2% of the EAPR customers transitioned to TOD chose the alternative fixed rate.

The TOD rate supports the principles of the Board's Strategic Direction as it better aligns residential rates with costs and gives SMUD the ability to achieve our environmental goals by sending price signals that influence customer behaviors; such as encouraging efficiency and conservation. We have seen a reduction of energy use during the Peak time period which may help to defer future infrastructure investments. Additionally, this reduction in peak load will save our customers money and help the environment by reducing energy generation during the time energy is most expensive and most carbon-intensive. Customers have not only shifted their load out of the Peak time period but have also reduced their usage in all time periods. At this point, it is assumed that the primary driver of that reduction is due to TOD.
So far, preliminary findings show that in the first summer, TOD has benefitted customers and SMUD by reducing the carbon impact by approximately 12,800 tonnes per year, which is the equivalent of removing approximately 4,200 cars with internal combustion engines from the road for one year. A full presentation of the benefits of TOD is being presented to the Board at the finance committee presentation in March.

3) Additional supporting information

a) The Board establishes a rate target of 18% below PG&E's published rates on a system average basis. In addition, the Board establishes a rate target of at least 10% below PG&E's published rates for each customer class.

SMUD continues to maintain average rates that are lower than PG&E’s, both at a system level and by rate class. Figure 1 provides a detailed picture of the difference between SMUD’s and PG&E’s projected average rates by rate class in 2019 as well as the difference in rates in 2018.

Figure 1 – Summary of SMUD and PG&E Rate Comparison in $/kWh

<table>
<thead>
<tr>
<th>Customer Class</th>
<th>Description</th>
<th>PG&amp;E 2019</th>
<th>SMUD 2019</th>
<th>Difference Below PG&amp;E* 2019</th>
<th>Difference Below PG&amp;E* 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Standard E-1</td>
<td>$0.2505</td>
<td>$0.1509</td>
<td>-39.8%</td>
<td>-35.6%</td>
</tr>
<tr>
<td></td>
<td>Low Income CARE*** EAPR &amp; EAPRMD**</td>
<td>$0.1471</td>
<td>$0.0987</td>
<td>-32.2%</td>
<td>-27.3%</td>
</tr>
<tr>
<td></td>
<td>All Residential</td>
<td>$0.2205</td>
<td>$0.1439</td>
<td>-34.7%</td>
<td>-30.9%</td>
</tr>
<tr>
<td>Small Commercial*** &lt;= 20 kW</td>
<td>A-1 GFI/GSN T</td>
<td>$0.2572</td>
<td>$0.1502</td>
<td>-41.6%</td>
<td>-38.8%</td>
</tr>
<tr>
<td></td>
<td>21 - 299 kW A-6 GSS_T</td>
<td>$0.2456</td>
<td>$0.1391</td>
<td>-43.4%</td>
<td>-40.4%</td>
</tr>
<tr>
<td>Medium Commercial**** 300 - 499 kW</td>
<td>A-10 TOU-3</td>
<td>$0.2265</td>
<td>$0.1305</td>
<td>-42.4%</td>
<td>-40.1%</td>
</tr>
<tr>
<td></td>
<td>500 - 999 kW E-19 TOU-2</td>
<td>$0.2006</td>
<td>$0.1227</td>
<td>-38.8%</td>
<td>-34.8%</td>
</tr>
<tr>
<td>Large Commercial**** =&gt; 1 MW</td>
<td>E-20 TOU-1</td>
<td>$0.1598</td>
<td>$0.1038</td>
<td>-35.1%</td>
<td>-31.5%</td>
</tr>
<tr>
<td>Lighting</td>
<td>Traffic Signals TC-1 TS</td>
<td>$0.2453</td>
<td>$0.1178</td>
<td>-52.0%</td>
<td>-48.6%</td>
</tr>
<tr>
<td></td>
<td>Street Lighting various SLS NLGT</td>
<td>$0.2614</td>
<td>$0.1302</td>
<td>-50.2%</td>
<td>-40.7%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Ag &amp; Pumping AG ASN/D AON/D</td>
<td>$0.2162</td>
<td>$0.1332</td>
<td>-38.4%</td>
<td>-35.4%</td>
</tr>
<tr>
<td>System Average</td>
<td></td>
<td>$0.2109</td>
<td>$0.1340</td>
<td>-36.5%</td>
<td>-33.4%</td>
</tr>
</tbody>
</table>


** CARE vs. EAPR includes EAPR & EAPRMD customers.

*** Commercial rates include WAPA credits. The revenue forecast does not consider economic development discounts for year 2019.

As shown in Figure 1, the rate competitiveness by class varies for the different customer classes and is at least 32.2% below comparable PG&E class average rates. Since the creation of this annual monitoring report in 2007, SMUD has consistently maintained rates that were more than 18% below PG&E. See Appendix A for more details.
b) SMUD’s rate of change for both rates and bills shall be competitive with other local utilities on a system average basis.

SMUD’s system average rate increases are comparable with other local utilities, as shown in Figures 2 and 3. The values in the table are simple averages of rate or bill changes over the referenced period. Figure 2 shows the average of total annual bill amounts which vary year over year due to rate changes as well as changes in weather among other variables since customers’ load impacts the average bill. Values can be negative due to uncharacteristically drastic weather changes. Extremely hot weather will cause the average bill to increase regardless of changes in the average rate. Figure 1 in Appendix C shows the system average rates of the utilities used for the tables below.

**Figure 2 - Average Annual Bill Changes**

<table>
<thead>
<tr>
<th>Average Annual Bill Rate of Changes</th>
<th>SMUD</th>
<th>Local Utilities*</th>
<th>Local Utilities* Without PG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-yr avg. (2009 - 2018)</td>
<td>1.19%</td>
<td>2.34%</td>
<td>2.01%</td>
</tr>
<tr>
<td>5-yr avg. (2014 - 2018)</td>
<td>1.22%</td>
<td>0.9%</td>
<td>0.50%</td>
</tr>
</tbody>
</table>

**Figure 3 - Average Annual Rate Changes**

<table>
<thead>
<tr>
<th>Average Annual System Rate of Changes</th>
<th>SMUD</th>
<th>Local Utilities*</th>
<th>Local Utilities* Without PG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-yr avg. (2009 - 2018)</td>
<td>2.45%</td>
<td>3.09%</td>
<td>3.02%</td>
</tr>
<tr>
<td>5-yr avg. (2014 - 2018)</td>
<td>2.25%</td>
<td>1.93%</td>
<td>1.41%</td>
</tr>
</tbody>
</table>
c) Reflect the cost of energy when it is used

As approved in the 2017 rate process, and completed in November 2019, SMUD has transitioned all residential customers to SMUD's TOD Rate. SMUD's TOD rate is designed to more closely reflect the cost of energy when it is used, with prices highest between 5 and 8 p.m., when the cost of energy is the highest. In 2019, the Board approved a restructure of commercial rates which will improve the alignment of the cost of electricity with the price.

d) Encourage energy efficiency and conservation

SMUD encourages energy efficiency and conservation through the residential TOD rate structure, non-residential TOD rates and a variety of programs, such as offering rebates for energy-efficient appliances and heating and cooling systems, and energy-efficient LED lighting. With TOD Rates, when customers use energy is as important as how much they use. TOD Rates encourage customers to shift energy use from peak times when energy is more costly and is produced by a larger portion of carbon-emitting generation plants to off-peak times, when there is often excess carbon-free solar generation on our system. By shifting usage to times when non-carbon emitting resources are plentiful, customers not only save money, they also help reduce carbon emissions and help SMUD achieve our carbon reduction goals. The TOD rate structure as well as the commercial rate restructure are designed to be revenue neutral, so customers can save money if they shift or reduce their usage from peak hours. More detailed information about rebates and savings tips can be found on smud.org.

e) Minimize “sticker shock” in the transition from one rate design to another

SMUD follows this principle through gradualism and balance between rate implementation and customer satisfaction when making rate structure changes in combination with rate increases. For example, to minimize “sticker shock,” SMUD raised residential rates in 2018 but not in 2019 so that customers would experience the transition to TOD with no rate increase impacts. This was done to help reduce confusion and facilitate explanations that the bill changes were caused by the structural rate change and customer behavior, and not a rate increase. In addition, an optional residential fixed rate is an alternative to the standard TOD rate for those customers that do not wish to be on TOD. Additionally, the approved rate transition to the EAPR program will be phased in over three years to minimize bill impacts to
our low-income customers. Furthermore, the commercial rate restructure is being phased in over an 8-year period in order to mitigate bill impacts.

f) Offer flexibility and options

SMUD provides flexibility and rate options to its customers. Residential customers may select custom due dates, budget billing, and net energy metering customers can choose the monthly settlement option. The residential rate transition to TOD included the option to switch to a fixed rate as an alternative to the standard TOD rate. All customers may make online payments and set up billing alerts.

Also, qualified commercial customers moving to SMUD's service area may choose between two different Economic Development Rate discount structures, selecting the option that best suits their business needs. Figure 5 below shows the available options.

Figure 4 – Economic Development Discount Price Structures

<table>
<thead>
<tr>
<th>Economic Development Discount</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option A</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>5.0%</td>
<td>4.0%</td>
<td>3.0%</td>
<td>2.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Option B</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disadvantaged Communities Economic Development Discount</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option C</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>6.5%</td>
<td>5.0%</td>
<td>3.5%</td>
<td>2.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Option D</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

g) Be simple and easy to understand

SMUD works to make sure its many programs and rates are simple and easy to understand. For example, staff designed the TOD rate and future commercial rates to balance simplicity while still reflecting the cost of energy when it is used. Significant ongoing customer outreach will assist customers in understanding the new rate designs.

h) Meet the needs of people with fixed low incomes and severe medical conditions
SMUD continues to meet the needs of people with fixed low incomes and severe medical conditions. The restructuring of the EAPR program will further improve the assistance that we can offer to the customers most in need by basing assistance on federal poverty level. SMUD is working with customers to ease the transition with various programs.

i) Equitably allocate costs across and within customer classes

To ensure costs are equitably allocated across and within customer classes, staff updates SMUD’s marginal cost study and performs rate costing studies prior to recommending rate structure changes. For example, the marginal cost study was updated in 2016, and the results of the study were used to develop the cost-based standard residential TOD rate. The details of this analysis were included in the 2017 CEO & GM Report.

In 2019, the Board approved changes to the commercial rate structures which had not been adjusted in decades. The new rate structure will better align cost across the different commercial classes as well as give SMUD a more stable revenue collection as the changes move revenue from variable components to fixed components. This change will also support the Integrated Resource Plan’s (IRP) electrification goals by lowering the variable cost of energy.

j) Reduce Use On-Peak

Both the residential TOD rate and the newly approved commercial time of day rates will send signals to customers to reduce their on-peak usage. The peak time for residential customers is 5 pm to 8 pm and the peak time for commercial customers is 4 pm to 9 pm. These time periods correspond to the highest $/kWh in the rate design to encourage customers to shift their usage outside of the peak period.

4) Challenges:

a) Rate Pressures

While SMUD has been able to keep rates low, SMUD does face cost pressures going forward from both known and unknown drivers. Examples of known drivers include:

1. Wildfire mitigation, including the increased cost of fire insurance and additional vegetation management,
2. SMUD's newly-adopted IRP to fund initiatives such as transportation and building electrification, storage as well as continuing to encourage energy efficiency to achieve carbon reduction goals, as well as increasing carbon free resources such as new solar and wind.

3. Increased costs for SMUD labor and benefits, as well as costs for materials, goods and services,

4. New and enhanced technology solutions to support cyber security, customer experience, and distributed energy resources, and

5. Additional capacity to ensure SMUD can reliably serve load during peak demand.

SMUD also must be prepared to weather unknown cost drivers. Examples of these are additional requirements stemming from new legislation in response to the recent wildfires, or potentially new mandates to achieve California environmental goals.

An additional challenge may materialize with the SD-2 requirement of, “SMUD’s rate of change for both rates and bills shall be competitive with other local utilities” if the other local public utilities adopt a less aggressive carbon goals than SMUD has done, since this will be a significant driver of future rate increases.

b) Cost Allocation

Due to the current Net Energy Metering (NEM) rates, there is a cost shift to non-NEM customers. This is not aligned with SD-2 guidance. Currently, SMUD is hosting a stakeholder group to receive input into a NEM 2.0 successor rate. This stakeholder process includes both a Technical Working Group and a Community Working Group that will provide feedback on shaping the NEM 2.0 rate. The goal of the successor rate is to assist in addressing the current cost-shift to non-NEM customers and to create a new NEM tariff that is more aligned with the SD-2 guidelines as well as support SMUD’s achievement of our aggressive carbon goals.

5) Recommendation: It is recommended that the Board accept the Monitoring Report for SD 2, Competitive Rates.
Appendix A: Historical Rate Comparison with PG&E

Figure 1: Compares SMUD and PG&E system average rates for the past 10 years. On a system average basis, SMUD's system average rates have averaged 28% below PG&E's since 2010.

Figure 1 – SMUD and PG&E Historical System Average Rate Comparison
Appendix B: PG&E Updates

Overview of PG&E’s recent rate proceedings: In 2019 PG&E had five rate changes, increasing the system average rate in $kWh from $0.1982 in 2018 to $0.2109 in 2019 as shown in Figure 1.

Figure 1 – PG&E 2018-19 Rate Changes

<table>
<thead>
<tr>
<th>Rate Change (%)</th>
<th>January</th>
<th>March</th>
<th>September</th>
<th>2018</th>
<th>January</th>
<th>March</th>
<th>May</th>
<th>July</th>
<th>October</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.40%</td>
<td>1.80%</td>
<td>1.40%</td>
<td>3.60%</td>
<td>-1.30%</td>
<td>2.20%</td>
<td>2.00%</td>
<td>0.80%</td>
<td>1.90%</td>
<td>5.60%</td>
<td></td>
</tr>
<tr>
<td>System Rate ($/kWh)</td>
<td>$0.1917</td>
<td>$0.1954</td>
<td>$0.1982</td>
<td>$0.1955</td>
<td>$0.1999</td>
<td>$0.2060</td>
<td>$0.2070</td>
<td>$0.2109</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Includes California Climate Credit

PG&E’s 2020 forecast is a 7 percent increase in PG&E’s system bundled average electric rate. For Direct Access (DA) and Community Choice Aggregation (CCA) customers, whose average rates exclude commodity charges because these customers purchase energy from third-party service providers, PG&E is forecasting a 12 percent increase in PG&E’s system average rate. PG&E is requesting approval to implement PG&E’s electric rates on January 1, 2020 based on the 2020 sales forecast proposed and approved in the 2020 Energy Resource Recovery Account (ERRA) Forecast proceeding.

Pending Rate Actions/Initiatives

- **PG&E’s 2020 General Rate Case:** PG&E is proposing a $1.058 billion increase over currently authorized spending for 2019. More than half of PG&E’s proposed increase would be directly related to wildfire prevention, risk reduction, and additional safety enhancements. This proposal would increase a typical residential customer bill by 6.4 percent or $10.57 per month ($8.73 for electric service and $1.84 for gas service). An average CARE customer would see an increase of about $7.01 a month ($5.54 for electric service and $1.47 gas service). Customer bills would change some time in 2020 following a decision by the CPUC.

- **Commercial Electric Vehicle Subscription Rate:** PG&E filed an application for approval of new commercial rates for load serving electric vehicle service equipment (EVSE) on November 5, 2018. After public input a joint stipulation entered between PG&E and Public Advocates on May 22, 2019 outlined the following commercial electric vehicle (CEV) rates for the Commission’s consideration.
<table>
<thead>
<tr>
<th>Rate Element</th>
<th>CEV-S4</th>
<th>CEV-L-S5</th>
<th>CEV-L-P6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscription Charge per Kilowatt (kW) of Peak Demand</td>
<td>$21.17/10kW block</td>
<td>$167.75/50kW block</td>
<td>$153.41/50kW block</td>
</tr>
<tr>
<td>Peak Energy Charge</td>
<td>$0.32166/kilowatt-hour (kWh)</td>
<td>$0.33410/kWh</td>
<td>$0.32611/kWh</td>
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<tr>
<td>Off-Peak Energy Charge</td>
<td>$0.12966/kWh</td>
<td>$0.12086/kWh</td>
<td>$0.11723/kWh</td>
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<tr>
<td>Super Off-Peak Energy Charge</td>
<td>$0.10299/kWh</td>
<td>$0.09760/kWh</td>
<td>$0.09457/kWh</td>
</tr>
</tbody>
</table>

The proposed CEV peak period is 4:00 p.m. – 9:00 p.m. all days of the year, and the proposed CEV super off-peak period is 9:00 a.m. – 2:00 p.m. all days of the year. All other hours would fall in the proposed CEV off-peak period. There is no proposed seasonal differentiation in the CEV rates. There are no demand charges or fixed charges proposed for the CEV rates although the subscription charge is based on peak demand. Costs normally collected by such charges would instead be collected through the subscription charge and energy charges.

- **Default Time-of-Use Rates**: PG&E is scheduled to begin defaulting most Residential customers to more cost-based default TOU rates (subject to their ability to opt-out to another applicable rate) starting in 2020 and continuing in waves for a period of up to eighteen months, ending in 2022.

- **PG&E Commercial Rate Restructure**: PG&E is transitioning its Non-Residential customers to new TOU periods with a later peak period (4pm to 9 pm), reflecting the late afternoon peak market prices. These Non-Residential rates with new TOU periods will become available on an “opt-in” basis beginning in 2019 and are scheduled to become mandatory in late 2020 (for Commercial and Industrial (C&I) customers) and early 2021 (for Agricultural customers).

- **Chapter 11 Bankruptcy**: On January 29, 2019 PG&E filed for chapter 11 bankruptcy. PG&E Corporation and Pacific Gas and Electric Company (together, "PG&E") have agreed to a settlement with the Official Committee of Tort Claimants (TCC) and with firms representing individual claimants who sustained losses from the 2015 Butte Fire, 2017 Northern California Wildfires and 2018 Camp Fire. The settlement agreement is valued at approximately $13.5 billion and has the support of the TCC. The settlement would resolve all claims arising from those fires, including the 2017 Tubbs Fire as well as all claims arising from the 2016 Ghost Ship Fire in Oakland. The settlement is subject to a number of conditions and is to be implemented pursuant to PG&E’s Chapter 11 Plan of Reorganization (the "Plan"), which is subject to confirmation by the Bankruptcy Court in accordance with the provisions of the Bankruptcy Code. Bankruptcy Court approval of the settlement agreement would put PG&E on a sustainable path forward to emerge from Chapter 11 by the June 30, 2020, the deadline to participate in the State of California’s go-forward wildfire fund.
Appendix C: Local Utility Rates

- **Modesto Irrigation District (MID):** MID has not had a rate increase since 2012. MID did true-up their Environmental Energy Adjustment that resulted in a change from $0.0067/kWh to $0.0079/kWh.

- **Turlock Irrigation District (TID):** TID has not had a rate increase since 2015 and there is no plan to modify rates in the near future. TID did implement an experimental EV rate effective 4/1/2019 which includes a $17.00 customer charge and two time of use periods that vary in price by season.

- **Roseville Electric:** Roseville Electric has not had a rate increase since 2014 and there is no plan to increase their rates for 2020.

- **Lodi Electric:** Lodi Electric approved a 2% rate increase in 2017. Lodi did not change their base rates in 2019 and they do not have any changes forecasted for 2020. Lodi has a monthly energy cost adjustment that adjusts as power costs increase or decrease. The range of the energy cost adjustment for 2019 was $0.0264 to -$0.0082 $/kWh.

- **Los Angeles Department of Water and Power (LADWP).** LADWP had a 4.2% rate increase in fiscal year 2018-2019 and plans to have a 5.2% rate increase in fiscal year 2019-2020.

While SMUD's neighboring utilities have not raised rates recently, SMUD's system average rate is still competitive, as shown in Figure 1. Figure 1 uses data from the U.S. Energy Information Administration and 2018 is the most recent data available.

**Figure 1 — 2018 Utility System Average Rate Comparison**

![Graph showing system average rates for various utilities including SMUD, Roseville, Turlock, Modesto, Lodi, and LADWP. The rates are compared on a graph with the ranges 0.1000 to 0.2000 and the years 2018 and 2019.]

Including pass-through mechanisms in rates is a common utility practice, allowing the utility to collect enough revenue without having to increase rates. SMUD has the Hydro Generation Adjustment, which allows for a small additional charge on customer bills in the event of less
than median precipitation. Figure 2 details the pass-through mechanisms some of SMUD’s
neighboring utilities have as part of their rate structures.

Figure 2 — Utility Pass-through Mechanisms

<table>
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<th>Pass-through</th>
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<tbody>
<tr>
<td>SMUD</td>
<td>Hydroelectric Generation Adjustment</td>
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<tr>
<td>Modesto Irrigation District</td>
<td>Capital Infrastructure Adjustment</td>
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<td></td>
<td>Environmental Energy Adjustment</td>
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<tr>
<td>Turlock Irrigation District</td>
<td>Power Supply Adjustment</td>
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<tr>
<td></td>
<td>Environmental Charge</td>
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<tr>
<td></td>
<td>Public Benefits Surcharge</td>
</tr>
<tr>
<td>Roseville Electric</td>
<td>Renewable Energy Surcharge</td>
</tr>
<tr>
<td></td>
<td>Greenhouse Gas Surcharge</td>
</tr>
<tr>
<td></td>
<td>Hydroelectric Adjustment</td>
</tr>
<tr>
<td>Lodi Electric</td>
<td>Energy Cost Adjustment</td>
</tr>
<tr>
<td>LADWP*</td>
<td>Energy Cost Adjustment</td>
</tr>
<tr>
<td></td>
<td>Electric Subsidy Adjustment</td>
</tr>
<tr>
<td></td>
<td>Reliability Cost Adjustment</td>
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</tbody>
</table>

* LADWP has other adjustments to reflect approved rate increase

Including a fixed charge amount on residential customers bills is also a common utility practice. The
fixed charge allows for revenue collection for fixed assets that do not vary with electricity consumption.
Figure 3 below outlines the fixed charge amount of SMUD’s neighboring communities.
Figure 3 – Monthly Fixed Charge Amount

Monthly Fixed Charge (2019) $/Customer

- Roseville: $26.00
- LADWP Tier 3*: $22.70
- SMUD: $20.30
- Modesto ID: $20.00
- Turlock ID: $17.00
- Lodi: $10.20
- PG&E: $10.00
- LADWP (min. bill)*: $10.00

$- $5.00 $10.00 $15.00 $20.00 $25.00 $30.00
Appendix D: Historical Rate Increases

Figure 1 shows that SMUD's historical rate increases have tracked the Consumer Price Index (CPI) over the past 28 years.

Figure 1 – Annual Rate Increase vs CPI
The Board Meeting Date:
2/20/20

Board Meeting Date:
2/12/20

Board Policy: SD — 3 - Access to Credit Markets

Benefits: To demonstrate to the Board the District’s progress in complying with SD-3

Cost/Budgeted: N/A

Alternatives: N/A

Affected Parties: N/A

Coordination: Treasury

Presenter: Russell Mills

Requested Action: Accept the monitoring report for Strategic Direction SD-3, Access to Credit Markets.

Summary: With SD-3, the Board established that maintaining access to credit markets is a core value for SMUD. Pursuant to this direction, the Board has set certain financial targets, financial considerations, and minimum credit ratings for SMUD to maintain. This annual report outlines the importance of these SD-3 requirements and provides evidence of SMUD’s compliance during 2019.

Board Policy: SD — 3 - Access to Credit Markets

Benefits: To demonstrate to the Board the District’s progress in complying with SD-3

Cost/Budgeted: N/A

Alternatives: N/A

Affected Parties: N/A

Coordination: Treasury

Presenter: Russell Mills

Additional Links:
TO: Board of Directors                              DATE: February 5, 2020
FROM: Claire Rogers

SUBJECT: Audit Report No. 28007181
        Board Monitoring Report; SD-03: Access to Credit Markets

Audit and Quality Services (AQS) reviewed the SD-03 Access to Credit Markets 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 course of 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 3 on Access to Credit Markets states that:

Maintaining access to credit is a core value of SMUD.

Therefore:

a. For SMUD’s annual budgets, the Board establishes a minimum target of cash coverage of all debt service payments (fixed charge ratio) of 1.50 times.

b. When making resource decisions, SMUD shall weigh the impacts on long-term revenue requirements, debt, financial risk and flexibility.

c. SMUD’s goal is to maintain at least an “A” rating with credit rating agencies.

2. **Executive summary**

SMUD relies on the use of borrowed funds to pay for a portion of its capital needs on an ongoing basis. The Board adopted SD-3, Access to Credit Markets, to help ensure that SMUD maintains the ability to raise new money at competitive rates in the bond market as needed. Making prudent use of borrowed funds to finance capital improvements can help SMUD to mitigate major rate adjustments in periods of intensive capital expansion, and allows SMUD to allocate the costs of those improvements over their useful lives to the ratepayers who benefit from them. Maintaining access to credit markets supports our objective to be financially flexible to make necessary and timely investment and take advantage of opportunities while remaining competitive.

One of the most important indicators of an organization’s ability to access credit markets is the independent assessment made by credit rating agencies. SMUD is rated by the three major rating agencies: Standard & Poor’s (S&P), Moody’s, and Fitch, which review SMUD’s credit on approximately an annual basis. The credit ratings assigned are intended to give investors the rating agency’s view of the likelihood that SMUD will pay principal and interest on bonds when due. They utilize financial metrics in assessing creditworthiness such as the Fixed Charge Ratio that measures revenue sufficiency to meet obligations, and Days Cash on Hand, a measure of liquidity. They also measure leverage, such as our debt outstanding per customer, and the rate capacity to finance future capital projects without placing undue burden on ratepayers. SMUD’s overall governance and risk management
practices are also important to the agencies, along with the ability and willingness to raise rates when necessary while maintaining competitive rates.

As referenced in the attached ratings agency reports, SMUD has very strong metrics and due to well managed cash flow, limited borrowing over the past 5 to 7 years, and the ability to plan to a more modest fixed charge ratio relative to AA rated peers. The most recent SMUD credit reports from both S&P and Fitch also specifically cite the Board's demonstrated willingness to raise rates to support financial performance.

Credit ratings heavily impact an organization's ability to borrow money in the municipal markets, as well as the interest rates they will be required to pay. Higher credit ratings translate into lower borrowing costs. For example, if SMUD's credit ratings were to fall into a lower category, from AA to A, the impact at today's rates would be approximately $200k/yr for every $100 million borrowed.

Credit ratings also impact an organization's ability to conduct general business transactions. Trading partners utilize credit ratings as a factor in assessing their willingness to transact with SMUD, and to determine commercial terms. Stronger credit ratings enable SMUD to negotiate better terms and conditions for contracts. For example, SMUD's healthy credit ratings minimize the amount of collateral posting required under many of its commodity contracts to hedge natural gas and power. Likewise, if SMUD's ratings were to drop from current levels, collateral posting requirements would increase accordingly. In many cases, a reduction in SMUD's credit ratings below a certain threshold gives our counterparty the right to terminate the contract.

In support of maintaining its financial strength and as a financial risk mitigator SMUD procures insurance. SMUD maintains a comprehensive property and casualty insurance program, with coverage in excess of various self-insured retentions ranging from $5,000 to $5,000,000, designed to protect against catastrophic losses that would have an adverse effect on its financial position or operational capabilities. Insurance programs are continuously reviewed and modified when construction, operational exposures, or developments in the insurance industry so warrant. Long term relationships with a variety of insurers minimize SMUD's susceptibility to the effects of insurance market cycles. SMUD budgets reserves to meet potential insurance deductibles and self-insured liability claims and has had no claims that have exceed coverage limits.
SMUD has remained in compliance with SD-3 during 2019 as evidenced by:

a. Maintained key financial metrics, including a fixed charge ratio above the minimum policy target of 1.50 times.
   1. 2.21 times in 2018
   2. 2.09 times in 2019 (draft figure as of January 24, 2020)
   3. 1.69 times in 2020 (projected in 2020 Budget)

b. Credit ratings were affirmed at ‘AA’ from S&P and Fitch, and Aa3 from Moody’s. However, S&P and Moody’s changed their outlook to negative for SMUD, primarily as a result of the increased wildfire risk and liability borne by all power utilities from the interpretation of inverse condemnation statutes.

c. Entered into a $540 million commodity prepay transaction, issued by NCEA, a SMUD created JPA, which will result in average annual commodity savings of approximately $3 million over the initial 5-year term. This innovative transaction was the first municipal finance prepay to incorporate a switch feature that gives SMUD the option to switch from gas to electricity or a renewable PPA at year 10 or later.

d. Issued $392 million of 2019 Series A, B & G Electric Revenue Refunding Bonds. This transaction not only refunded outstanding commercial paper, but also included SMUD’s first ever issuance of Green Bonds for the renovation of SMUD’s Headquarters building.

e. Defeased the remaining CVFA and SCA outstanding debt totaling $18 million one and two years early, respectively, which lowers SMUD’s annual debt costs and increases the fixed charge ratios in 2020 and 2021.

f. Expanded SMUD’s Commercial Paper Program from $288 million to $400 million and implemented new financial management guidelines that increased the minimum liquidity target of 150 days’ cash and plan for maintaining a $150 million reserve of unused commercial paper capacity. The expanded commercial paper program combined with Treasury’s new guidelines will provide improved financial flexibility for matching capital spending needs and a reserve capacity to mitigate unforeseen events.

g. Made $45 million in additional supplemental contributions to CalPERS as part of a 10-year pension funding strategy to eliminate its unfunded pension liability—an obligation rating agencies are increasingly focusing on in their reviews. Prior to these contributions, SMUD’s Other Post-Employment Benefits (OPEB) and Pension were of 88% and 78% funded, respectively.

h. Successfully renewed Property and Casualty insurance coverage at market rates, while increasing limits for Directors’ and Officers’ insurance, and
maintaining Cyber insurance and coverage for the Sacramento Power Academy. In this challenging insurance market, SMUD not only maintained its insured Wildfire coverage limits at $186 million, but also decreased its self-insured retention within those limits from $114 million to $64 million.

3. Credit Strengths:

SMUD Specific Credit Strengths mentioned in rating’s agency reports:
   a. Extremely strong fixed charge coverage
   b. Very strong liquidity unrestricted cash reserves
   c. Prudent financial policies, including strong internal coverage and liquidity targets;
   d. Diverse, low-cost, and relatively low greenhouse-gas-emitting power supply mix
   e. Demonstrated willingness and ability to adjust rates to recover costs and maintain margins
   f. Reduced reliance on debt to finance capital needs
   g. Strong risk management and hedging procedures, particularly concerning gas supply for its gas fired plants.

4. Challenges:

Below are comments from recent rating’s agency reports regarding challenges to SMUD’s credit rating:
   a. Wildfire liability and inverse condemnation exposure
   b. Increased forecast of capital spending over next five years could put pressure on key credit metrics;
   c. Potential for liquidity declines as SMUD relies less on debt and more heavily on cash on hand to fund capital projects in the future;
   d. Moderate although declining debt burden as a percentage of capitalization, or Debt per customer
   e. Moderate long-term gas exposure and potential for collateral posting requirements requiring maintenance of strong liquidity

5. Additional supporting information

Details on ratings variables, SMUD specific credit strengths, factors that could lead to an upgrade, and insurance are listed below:

Ratings Variables:
The rating agencies evaluate a number of factors in deriving municipal power ratings. These include:
   a. Financial ratios and metrics
   b. Governance Structure and Management
   c. Rate Competitiveness
   d. Cost of production/purchased power (particularly with respect to higher cost renewables)
e. Risk Management Practices  
f. Service area demographics  
g. Regulatory factors  

6. Recommendation:  

It is recommended that the Board accept the Monitoring Report for SD-3, Board Strategic Direction on Access to Credit Markets
NARRATIVE:

Requested Action: Approve SMUD’s participation in the statewide Low Carbon Fuel Standard (LCFS) Clean Fuel Reward Program.

Summary: CARB as part of their LCFS program is requiring all utilities to sign onto the Clean Fuel Reward Program or lose their residential Electric Vehicle (EV) base LCFS credits. The Clean Fuel Reward Program will provide a statewide point of purchase incentive for all new EV purchases. The program requirements will require all utilities to use a portion (SMUD portion is 35% going to 45% in 2023) of their residential LCFS credits to fund the Clean Fuel Reward Program. The program is scheduled to start operations in early 3rd Quarter 2020.


Benefits: Will provide an upfront cash incentive for new EV purchases to help increase EV adoption in supporting SMUD’s IRP GHG reduction goals. By signing onto the Clean Fuel Rebate Program SMUD will also get to retain the remaining portion of the credits that can be used to offset SMUD EV Program Costs with additional requirements to support equity communities.

Cost/Budgeted: Projected SMUD LCFS Residential Credit value budgeted to support the Clean Fuel Reward Program: 2020: $2.55M, 2021: $3.68M, 2022: $5.1M (Note: this is 35% of our expected residential LCFS value)

Alternatives: Not participate in the program and lose all LCFS residential base credits which are used to fund a majority of SMUD’s residential EV program elements.

Affected Parties: ESR&D, CCS/Advanced Energy Solutions, Energy Trading, State Regulatory Policy, Budget Office, Legal

Coordination: Bill Boyce

Presenter: Bill Boyce (Manager, Electric Transportation, Energy Strategy Research and Development)
## BOARD AGENDA ITEM

### STAFFING SUMMARY SHEET

**BOD 2020-001**

<table>
<thead>
<tr>
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<tr>
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### Consent Calendar

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<td>No (If no, explain in Cost/Budgeted section.)</td>
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### FROM (IPR)

- Rob Kerth / Donna Lofton

### DEPARTMENT

- Board Office

### MAIL STOP

- A310

### EXT.

- 5079

### DATE SENT

- 12/19/19

### 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:**
Rob Kerth, Board President

### SUBJECT

Board Work Plan
**NARRATIVE:**

Requested Action: Provide a summary of committee direction from the Board to Staff.

Summary: During a Board discussion at the January 2017 Policy Committee, the Board requested having an on-going opportunity to do a wrap up period at the end of each committee meeting to summarize various Board member suggestions and requests that were made at the meeting 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 what 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

Coordination: Donna Lofton, Special Assistant to the Board

Presenter: Heidi Sanborn, Policy Committee Chair

**ITEM NO:**

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**Consent Calendar**

- [ ] Yes
- [X] No

- **Budgeted**
  - [ ] Yes
  - [ ] No

**FROM (IPR)**

Heidi Sanborn / Donna Lofton

**DEPARTMENT**

Board Office

**MAIL STOP**

B307

**EXT.**

5079

**DATE SENT**

12/23/19

**SUBJECT**

Summary of Committee Direction

**ITEM NO:**

FOR LEGAL USE ONLY