AGENDA

SACRAMENTO MUNICIPAL UTILITY DISTRICT
BOARD OF DIRECTORS MEETING

In accordance with the Governor’s Executive Order N-29-20 and the Emergency Board Meeting Procedures adopted by the SMUD Board of Directors, the regular Board meeting and other public meetings are closed to the public to align with state, local, and federal guidelines and social distancing recommendations for the containment of the coronavirus.

Live video streams and indexed archives of meetings are available at: http://smud.granicus.com/ViewPublisher.php?view_id=16

Members of the public may register to provide verbal comments at an upcoming Board or Committee meeting by e-mailing a request to speak to PublicComment@smud.org. Please include the date of the meeting, name, and topic or agenda item the requestor wishes to speak on. The request may also be submitted while the meeting is in progress during the standard time for the agenda item or topic. Pre-registration is strongly encouraged by no later than 3:00 p.m. on the day of the meeting.

Members of the public may provide written public comments on a specific agenda item or on items not on the agenda (general public comment) by submitting comments via e-mail. Comments may be submitted to PublicComment@smud.org and will be placed into the record of the meeting.

Members of the public that are listening to or watching the live stream of a Board meeting and wish to submit written comments on a specific agenda item as it is being heard may submit their comments, limited to 250 words or less, to PublicComment@smud.org, noting the agenda item number in the subject line. The Board President may read comments for items on the agenda into the record, in her discretion, based upon such factors as the length of the agenda or the number of e-mail comments received. General public comment for items not on the agenda will not be read into the record but will be provided to the Board and placed into the record of the Board meeting if it is received within two hours after the meeting ends.

April 15, 2021 – 5:30 p.m.
Zoom Webinar Link: Join SMUD Board of Directors Meeting Here
Webinar ID: 161 863 5050
Password: 712202
Phone Dial-in Number: 1-669-254-5252

Call to Order.
  a. Roll Call.

1. Approval of the Agenda.

2. Committee Chair Reports.
   a. Committee Chair report of April 6, 2021, Strategic Development Committee
   b. Committee Chair report of April 7, 2021, Policy Committee
   c. Committee Chair report of April 14, 2021, Finance and Audit Committee
   d. Committee Chair report of April 14, 2021, Energy Resources & Customer Services Committee
Items 6 and 10 through 13 were reviewed by the April 7, 2021, Policy Committee. Items 7 through 9 were reviewed by the April 14, 2021, Finance and Audit Committee.

Comments from the public are welcome when these agenda items are called.

Consent Calendar:

3. Approve Board member compensation for service rendered at the request of the Board (pursuant to Resolution 18-12-15) for the period of March 16, 2021, through April 15, 2021. (Gary King)

4. Approval of the minutes of the regular meeting of March 18, 2021.

5. Approval of the minutes of the special meeting of March 31, 2021.

6. Approve proposed revisions to Strategic Direction SD-6, Safety. Policy Committee 4/7. (Gary King)

7. Authorize the Chief Executive Officer and General Manager to award a contract to Granite Construction Company to provide construction services for the Union Valley Bike Trail Extension Project in the Crystal Basin region of the Upper American River Project (UARP) for a total contract amount not-to-exceed $20,300,300, and for a contract term from May 1, 2021, to December 31, 2023. Finance and Audit Committee 4/14. (Frankie McDermott)

8. Authorize the Chief Executive Officer and General Manager to award contracts to Sierra National Construction, Inc., Arrow Construction, and Mountain G Enterprises for civil construction services for a contract term of three years from April 19, 2021, to April 18, 2024, for a total aggregate contract amount not-to-exceed $35 million. Finance and Audit Committee 4/14. (Frankie McDermott)

9. Authorize the Chief Executive Officer and General Manager to award contracts to Arrow Construction and Teichert Energy & Utilities Group, Inc. for urban civil construction services in Downtown Sacramento for a contract term of three years from April 19, 2021, to April 18, 2024, for a total aggregate contract amount not-to-exceed $30 million. Finance and Audit Committee 4/14. (Frankie McDermott)

Discussion Calendar:

10. Approve proposed revisions to Strategic Direction SD-1A, Purpose Statement. Policy Committee 4/7. (Paul Lau)
Presenter: Eric Douglas

11. Approve proposed revisions to Strategic Direction SD-1B, Vision Statement. Policy Committee 4/7. (Paul Lau)
Presenter: Eric Douglas
12. Approve proposed revisions to Strategic Direction SD-7, Environmental Leadership.  
   Policy Committee 4/7. (Paul Lau)  
   Presenter: Eric Douglas

13. Approve proposed revisions to Strategic Direction SD-9, Resource Planning.  
   Policy Committee 4/7. (Paul Lau)  
   Presenter: Eric Douglas

* * * * * * *

Informational Items:

14. Provide the Board with the financial results from the two-month period ended  
    February 28, 2021.  
    Presenter: Lisa Limcaco

15. Audit Reports: Quarterly Report on the Status of Recommendations as of March 31,  
    2021, and General Order 174.  
    Presenter: Claire Rogers

    Presenter: Jennifer Davidson

Public Comment:

17. Items not on the agenda.

Board and CEO Reports:

18. Directors' Reports.


20. CEO's Report.  
    a. Board Video re: Dairy Digesters

Summary of Board Direction

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FOLLOWING ADJOURNMENT OF THE FOREGOING SMUD BOARD OF DIRECTORS  
MEETING, ANNUAL MEETINGS OF THE FOLLOWING JOINT POWERS AGENCIES WILL  
CONVENE:

CENTRAL VALLEY FINANCING AUTHORITY  
NORTHERN CALIFORNIA GAS AUTHORITY NUMBER 1  
SACRAMENTO COGENERATION AUTHORITY  
SACRAMENTO MUNICIPAL UTILITY DISTRICT FINANCING AUTHORITY  
SACRAMENTO POWER AUTHORITY  
NORTHERN CALIFORNIA ENERGY AUTHORITY

* * * * * * *
The SMUD Board of Directors is currently operating under Emergency Board Meeting Procedures. In response to local, state, and federal directives, the following meetings will be held virtually (online).

<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting</th>
<th>Location</th>
<th>Start Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 14, 2021</td>
<td>Finance and Audit Committee and Special SMUD Board of Directors Meeting</td>
<td>Virtual Meeting (online)</td>
<td>5:30 p.m.</td>
</tr>
<tr>
<td>April 14, 2021</td>
<td>Energy Resources &amp; Customer Services Committee and Special SMUD Board of Directors Meeting</td>
<td>Virtual Meeting (online)</td>
<td>Immediately following the Finance and Audit Committee and Special SMUD Board of Directors Meeting scheduled to begin at 5:30 p.m.</td>
</tr>
<tr>
<td>April 28, 2021</td>
<td>Special Board of Directors Meeting</td>
<td>Virtual Meeting (online)</td>
<td>5:30 p.m.</td>
</tr>
<tr>
<td>May 11, 2021</td>
<td>Strategic Development Committee and Special SMUD Board of Directors Meeting</td>
<td>Virtual Meeting (online)</td>
<td>5:30 p.m.</td>
</tr>
<tr>
<td>May 12, 2021</td>
<td>Policy Committee and Special SMUD Board of Directors Meeting</td>
<td>Virtual Meeting (online)</td>
<td>5:30 p.m.</td>
</tr>
<tr>
<td>May 18, 2021</td>
<td>Finance and Audit Committee and Special SMUD Board of Directors Meeting</td>
<td>Virtual Meeting (online)</td>
<td>5:30 p.m.</td>
</tr>
<tr>
<td>May 19, 2021</td>
<td>Energy Resources &amp; Customer Services Committee and Special SMUD Board of Directors Meeting</td>
<td>Virtual Meeting (online)</td>
<td>5:30 p.m.</td>
</tr>
</tbody>
</table>
Regular Meetings of the Board of Directors are held at the SMUD Headquarters Building, 6201 S Street, Sacramento

The SMUD Board of Directors is currently operating under Emergency Board Meeting Procedures. In response to local, state, and federal directives, the following meeting will be held virtually (online).

May 20, 2021                           Virtual Meeting (online)                           5:30 p.m.

Pursuant to Resolution No. 20-06-08 adopted on June 18, 2020, Emergency Board Meeting Procedures are in effect:

Members of the public may make either a general public comment or comment on a specific agenda item by submitting comments via email. Comments may be submitted to PublicComment@smud.org. Comments will be provided to the Board and placed into the record of the Board meeting if it is received within two hours after the meeting ends.

Members of the public that are listening or watching the live stream of a Board meeting and wish to comment on a specific agenda item as it is being heard, may submit their comments, limited to 250 words or less, to PublicComment@smud.org. The Board President may read the comments into the record, in her discretion, based upon such factors as the length of the agenda, the number of email comments received, and whether the Board is in danger of losing a quorum. Comments will be provided to the Board and placed into the record of the Board meeting if it is received within two hours after the meeting ends.

Members of the public may register to provide verbal comments at an upcoming Board or Committee meeting by emailing a request to speak to PublicComment@smud.org. Please include the date of the meeting, name, and topic or agenda item the requestor wishes to speak on. The request may also be submitted while the meeting is in progress during the standard time for the agenda item or topic. Pre-registration is strongly encouraged by no later than 3:00 p.m. on the day of the meeting.

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

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

That this Board hereby approves Board member compensation for service rendered at the request of the Board (pursuant to Resolution 18-12-15) for the period of March 16, 2021, through April 15, 2021.
The Board of Directors of the Sacramento Municipal Utility District met in regular session via virtual meeting (online) at 5:30 p.m.

Roll Call:

Presiding: President Bui-Thompson
Prese: Directors Rose, Fishman, Herber, Kerth, Tamayo, and Sanborn

Present also were Paul Lau, Chief Executive Officer and General Manager; Laura Lewis, Chief Legal Officer and General Counsel and Secretary, and members of SMUD’s executive management; and SMUD employees and visitors.

Director Herber shared the environmental tip.

President Bui-Thompson called for approval of the agenda.

Director Sanborn moved for approval of the agenda, Director Kerth seconded, and the agenda was unanimously approved.

Director Sanborn, Chair, presented the report on the Policy Committee meeting held on March 10, 2021.

Director Fishman, Chair, presented the report on the Strategic Development Committee meeting held on March 9, 2021.

Director Herber, Chair, presented the report on the Finance and Audit Committee meeting held on March 16, 2021.

President Bui-Thompson called for statements from the public regarding items on the agenda, but none were forthcoming.

President Bui-Thompson then addressed the consent calendar consisting of Items 3 through 11. Director Fishman moved for approval of the consent calendar, Director Kerth seconded, and Resolution Nos. 21-03-01 through 21-03-08 were unanimously approved.
RESOLUTION NO. 21-03-01

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

That this Board hereby approves Board member compensation for
service rendered at the request of the Board (pursuant to Resolution 18-12-15)
for the period of February 16, 2021, through March 15, 2021.

Approved: March 18, 2021

INTRODUCED: DIRECTOR FISHMAN
SECONDED: DIRECTOR KERTH

<table>
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<tr>
<th>DIRECTOR</th>
<th>AYE</th>
<th>NO</th>
<th>ABSTAIN</th>
<th>ABSENT</th>
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<tr>
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<tr>
<td>SANBORN</td>
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RESOLUTION NO. 21-03-02

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

This Board accepts the monitoring report for Strategic Direction

SD-19, Diversified Business, substantially in the form set forth in Attachment

A hereto and made a part hereof.

Approved: March 18, 2021

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<tr>
<th>DIRECTOR</th>
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Audit and Quality Services (AQS) received the SD-19 *Diversified Business* 2020 Annual Board Monitoring Report and performed the following:

- A review of the information presented in the report to determine the possible existence of material misstatements;
- Interviews with report contributors and verification of the methodology used to prepare the monitoring report; and
- Validation of the reasonableness of a selection of the report’s statements and assertions.

During the review, nothing came to AQS’ attention that would suggest the SD Board Monitoring report did not fairly represent the source data available at the time of the review.
1) Background
Strategic Direction SD-19 states that:

Broadening and diversifying the products and services that SMUD offers is a key value. The desired results are to: a) generate new revenues that contribute to SMUD’s long-term financial health; b) spur the creation of innovative products and services; c) capture the value of SMUD’s brand and intellectual property; d) better leverage and optimize SMUD’s assets; and e) enable SMUD to continue to attract and retain a talented workforce.

Therefore:

a) SMUD shall broaden and diversify its lines of business, which may include:
   i) Being an external service provider;
   ii) Expanding wholesale energy market opportunities;
   iii) Capitalizing on intellectual property and assets to develop products and services either solely or through strategic partnerships;
   iv) Selling products and services aligned with SMUD’s purpose and Strategic Directions.

b) SMUD shall ensure any new lines of business:
   i) Benefit SMUD’s customers and our community;
   ii) Achieve a balanced, diversified portfolio of rewards and risks;
   iii) Create economic value without compromising SMUD’s financial health;
   iv) Do not pose unreasonable risk to SMUD’s reputation;
   v) Align with, leverage, and optimize SMUD’s strengths, assets and expertise;
   vi) Position SMUD for the future.

2) Executive Summary
a) Staff is tracking and reporting on three separate revenue portfolios. These revenue programs are deriving revenues that are not traditional electricity sales to customers. The three portfolios are a diverse mix of projects that leverage SMUD’s brand, intellectual property (IP) and assets to create new revenues for SMUD.

b) SMUD is in compliance with SD-19 Diversified Business.

c) There are three portfolios that generate revenue for SMUD. Prior to development of SD-19, tracking costs and revenues separately for each revenue program was
aligned with operational efforts, and not specifically configured in a manner to measure net revenue per project. Therefore, only revenues are reported for Legacy Revenue and Innovation Generator Programs. However for the New Revenue Program portfolio, both costs and revenues are reported.

The founding objective of the Legacy Revenue Programs was to improve customer satisfaction by offering products and services requested by customers. Revenue generation was secondary. A requirement was that such programs must be self-sustaining after 5 years. Because many of the operational costs are shared across many programs, it is difficult to calculate net revenues even though revenues are tracked separately.

For fiscal year 2020, the actual costs and revenues for each portfolio are as follows:

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Total Expenses</th>
<th>Total Revenues</th>
<th>Total Net Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Revenue Program</td>
<td>($8,326,910)</td>
<td>$10,387,025</td>
<td>$2,060,115</td>
</tr>
<tr>
<td>Legacy Revenue Programs</td>
<td></td>
<td>$3,442,440</td>
<td></td>
</tr>
<tr>
<td>Innovation Generator Program</td>
<td></td>
<td></td>
<td>$903</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$13,830,368</td>
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</tbody>
</table>

3) Additional Supporting Information
a) Financial Summary
A total of 16 programs/projects are included in the three portfolios. Descriptions of each deal within each portfolio are listed in Appendix A.

For the Legacy Revenue Programs, actual revenues of $3,442,440 were $644,533 above planned revenues of $2,797,907. The Innovation Generator Program actual revenues were negligible; again, there is no plan tracked for this program. Within the Legacy Revenue Programs, Cell Site Revenue and Home Power contributed most of the increased revenue out of the portfolio.

The New Revenue Program generated $10,387,025 in revenue which was $1,194,945 above the planned revenue of $9,192,080. The actual expenses of $8,326,910 were $5,039,938 lower than the planned expenses of $13,366,848. This resulted in positive net revenue of $2,060,115 compared to a planned negative net revenue of $4,174,768 – a variance of $6,234,883. The biggest driver of this improvement above plan is due to the Community Energy Services Program generating more revenue than planned while also considerably reducing expenses compared to plan.
In Fiscal Year 2020, the New Revenue Program crossed an important threshold generating positive net revenue for the first time since its inception in 2018. In 2018, the program had a net negative revenue of $4,538,322; in 2019 a negative net revenue of $664,924; and in 2020 a positive net revenue of $2,060,115.

The New Business Development Program is centrally responsible for developing, assessing, negotiating, overseeing implementation and tracking performance of existing and new business opportunities for all of SMUD. However, for all of 2020, this team was dedicated full time to planning and launching the California Mobility Center. This team did not actively track the current portfolios or pursue any new opportunities for SMUD.

b) Risk Summary

Risk is reported here only for the New Revenue Program and the methodology is derived from SMUD’s Enterprise Risk business practices. Risk is generally defined as the ability to successfully recoup SMUD’s investment over a reasonable timeframe, without damaging SMUD’s reputation, causing financial hardship, or resulting in regulatory or policy violations.

Risk is evaluated on five impact areas - Financial; Legal, Regulatory and Legislative; Operational; Strategic; and Reputational. See Appendix B for definitions.

The overall risk ratings of the New Revenue Program portfolio were not modified from the 2018 and 2019 assessments as no new opportunities were added. The previous overall portfolio risk was rated low. For 2020, the portfolio risk was not reevaluated or changed as it is still deemed low.

c) Compliance with Desired SD-19 Outcomes

Two of the three portfolios are meeting the desired results stated in the policy as follows:

New Revenue – The New Revenue Program is generating new revenue – position net revenue for the first time.

Spurs Innovative Product and Services – The New Revenue Program is delivering innovative products and services to existing SMUD customers and new customers.
Capture Value From Brand and IP – Intrinsically, brand and IP value are considered and included in the associated revenue models for many of the projects included in the portfolios.

Asset Leverage and Optimization – Transmission Sales is a prime example of how SMUD is extracting additional value from an existing asset by selling surplus transmission capacity more competitively. For 2020, SMUD generated 130% more in excess transmission sales than was planned.

4) Future Steps
Staff is working diligently to maximize the revenue generation that is possible from all three portfolios. Business processes are in place to ensure costs and revenues are tracked so that net revenues can be determined and the cost-benefit analysis of different endeavors can be evaluated.

In Q1 2021, the California Mobility Center will enter commercial operations providing a unique opportunity for SMUD to realize potential benefits from helping mobility companies commercialize new products and services. This new innovation channel for SMUD will be added to the New Revenue Program portfolio for tracking purposes.

5) Challenges
Going forward, regimented cost and revenue tracking will be paramount to assessment of performance under SD-19. As SMUD embarks on attaining new goals relative to zero carbon emissions, a robust innovation pipeline, greater reliance on strategic partnerships and business diversification will all play vital roles.

As part of this evolution as it relates to new revenue opportunities, SMUD needs to learn how to be comfortable with trying new business models for revenue generation, fail quickly and move on to other ideas. The innovation process must be quicker.

6) Recommendation
It is recommended that the Board accept the Fiscal Year 2020 Monitoring Report for SD-19 Diversified Business.
Appendix A
PORTFOLIO PROJECT LIST AND DESCRIPTIONS

New Revenue Program:

1. **Community Choice Aggregator Services**: SMUD provides back office support services such as data management, call center, whole energy, marketing, communications and customer care for Community Choice Aggregators.
2. **NEC/STI**: Partnership with NEC Corporation (NEC) to collaborate on energy solutions for Japanese electric power providers and others in the Asia Pacific region.
3. **Sacramento Power Academy (SPA)**: Program to train future utility workers in hundreds of utilities throughout the Western United States.
4. **Smart Grid Billing**: Smart Grid Billing enables real-time device monitoring and control to lower energy consumption and provide predictive maintenance for equipment. Our current pilot is with Embassy Suite and Hyatt Regency in Sacramento. This pilot offers an installation of a storage battery in the Hyatt in midtown that will be connected with the energy management system (EMS).
5. **OSI/DERMS Co-Development**: Open System International, Inc. (OSI) and SMUD strategic technology partnership to implement and deploy an industry-leading Distributed Energy Resource Management System (DERMS). SMUD will receive royalties from future sales of the enhanced product suite for DERMs.
6. **GridX**: Program will generate pro forma bills for all SMUD residential customers under various tariffs as part of RTOU planning efforts.

Legacy Revenue Programs:

1. **Cell Site Construction**: Revenues derived from SMUD review of cell site modifications or new construction.
2. **Energy Profiler**: Energy Profiler Online (EPO) lets customers to see their load profiles, energy consumption by time period, and other information on their facilities from any computer with Internet access.
3. **Home Power**: Program that covers customer’s homes against unforeseen electrical repairs to outlets, switches, circuit breakers, fuses and accessible internal wiring. All repairs are performed by a SMUD approved electrical contractor.
4. **Moving Connections**: Program designed to enhance a customer’s overall move experience. Residential customers can sign up for phone, internet, and other services, after transferring or starting electric service with a SMUD Customer Service Representative (CSR).
5. **Power Protection**: Residential program that prevents harmful voltage surges from entering a home via a whole house surge suppressor attached to the meter.
Appendix A

The program includes a manufacturer’s warranty covering surge damage to appliances and electronic equipment.

Innovation Generator Projects

1. **Advanced Power Strips:** Partnership with cable TV service providers to direct-install free advanced power strips in customer homes. The pilot model will explore leveraging third-parties to enable direct-install of EE and other measures that will benefit SMUD customers.

2. **DER Planning Software:** DER Planning Tool software will forecast adoption scenarios (rate of adoption and geographic location) of DERs like electric vehicles, solar PV, storage, etc.

3. **GridPoint:** Energy management as a service (EMaaS) provides real-time data collection, data analytics, and cloud computing to maximize energy savings and operational efficiencies. This pilot is focused on small and medium business customers.

4. **Intelligent Energy Solutions:** Software that minimizes certain electrical end uses in the customer’s home (e.g. pool pumps).

5. **Kandela:** Is a move concierge service for commercial customers, helping them manage their move, in exchange for referral revenue and licensing revenue if the program is adopted by other utilities.
Appendix B

RISK

Risk is tracked only for the New Revenue Program using best practices derived from SMUD’s Enterprise Risk business practices. Risk is generally defined as the ability to successfully recoup SMUD’s investment over a reasonable timeframe, without damaging SMUD’s reputation, causing financial hardship, or resulting in regulatory or policy violations.

A risk is the possibility that an event will occur and adversely affect the achievement of objectives. To help understand the nature of risk and to determine the level of risk, the risk assessment process is used. Risk Assessment requires calculations of three components of risk: impact, likelihood and velocity.

Impact is the magnitude of the potential risk based on six impact areas defined below. Likelihood is the chance that the event (risk) will occur and velocity is the speed at which the risk will occur, if it occurs. For the purposes of this rubric, the risk score is calculated as follow: \( \text{Impact} \times \left( \frac{\text{Likelihood} + \text{Velocity}}{2} \right) \)

The following five impact areas are considered for the New Revenue Program Portfolio.

Financial – This category focuses on how much SMUD’s financial commitment is including both cash and non-cash resources. Labor is considered here as well.

Legal, Regulatory and Legislative – This category considers whether the project has the potential to violate the law, cause significant fines, or a loss of confidential data. It considers whether the project exposes SMUD to higher levels of risks or new risks from a legal, regulatory or legislative perspective.

Operational – This category considers whether the project aligns with, leverages and/or optimizes SMUD’s strengths, assets and expertise. It also considers whether the project poses unreasonable risks to existing projects or operations.

Strategic – This category considers whether the project or the failure of the project will impact SMUD’s ability to achieve its strategy. It also considers whether the project poses unreasonable risk to SMUD’s goals and objectives.

Reputational – This category considers how the project could impact the perception of SMUD by its customers and the community. It considers whether the project poses unreasonable risk to SMUD’s reputation.

The following tables define the rubric for ratings of risk impacts.
## Appendix B

### Impact Areas

<table>
<thead>
<tr>
<th>Score</th>
<th>Name</th>
<th>Financial</th>
<th>Legal, Regulatory &amp; Compliance</th>
<th>Operational</th>
<th>Strategic</th>
<th>Reputational (Customer, Community, and Board Relations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Insignificant</td>
<td>&lt;$2M, no FTE</td>
<td>No legal/compliance violations. No confidential data involved.</td>
<td>Direct alignment with SMUD’s strengths, assets, and expertise. No impact to existing projects or operations.</td>
<td>No impact to achievement of goals and objectives.</td>
<td>No impact to metrics and surveys. No public criticism on media platform. No impact to SMUD’s reputation.</td>
</tr>
<tr>
<td>2</td>
<td>Minor</td>
<td>$2M&lt;$5M, 1 FTE</td>
<td>Minor legal/compliance violations. (regulatory fines &gt;$5K and torts)</td>
<td>Project may be a minor deviation from SMUD’s strengths, assets, and expertise. Minor delays or modifications to a few existing projects or operations.</td>
<td>Minor delays or modifications to goals and objectives.</td>
<td>Slight change in customer metrics and surveys. Limited public criticism from a few media platforms.</td>
</tr>
<tr>
<td>3</td>
<td>Moderate</td>
<td>$5M&lt;$10M, 2 FTEs</td>
<td>Moderate violations lead to increased scrutiny and some fines. (regulatory fines &gt;$100K)</td>
<td>The project may align with, leverage and optimize only a portion of SMUD’s strengths, assets and expertise. Moderate delays or modifications to project portfolio or operations.</td>
<td>Moderate delays or modifications to goals and objectives.</td>
<td>Modest decline in customer metrics and surveys. SMUD is subject to criticism from several opinion leaders/customers, media sources and the Board.</td>
</tr>
<tr>
<td>4</td>
<td>Major</td>
<td>$10&lt;$20M, 3-4 FTEs or team to support</td>
<td>Significant violations of law or potential loss of confidential data. Significant fines (regulatory fines &gt;$250K) Introduces new risks to SMUD that are difficult or costly to mitigate.</td>
<td>The project may be a major deviation from SMUD’s strengths, assets, and expertise. Significant delays or modifications to existing project portfolio or operations.</td>
<td>Significant delays or reductions in scope of goals and objectives.</td>
<td>Significant deterioration in customer metrics and surveys. Negative media reaches headlines of several publications. Significant erosion of trust from the Board.</td>
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<td>5</td>
<td>Critical</td>
<td>&gt;$20M, &gt;4 FTEs or an entire team or department to support</td>
<td>Violations result in widespread data loss, loss of qualifications for licenses. (regulatory fines &gt;$1M) Introduces new risks to SMUD that are too difficult or costly to mitigate.</td>
<td>New line of business with significant disruptions to SMUD’s strengths, assets and expertise. Cancellation of multiple projects and significant impacts of operations.</td>
<td>Failure to meet SMUD’s goals and objectives.</td>
<td>Major deterioration in customer metrics and surveys. Irreparable negative media coverage and damage to SMUD’s reputation and credibility with the media and the Board.</td>
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RESOLUTION NO. 21-03-03

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

This Board accepts the monitoring report for Strategic Direction SD-6, Safety, substantially in the form set forth in Attachment B hereto and made a part hereof.

Approved: March 18, 2021

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SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

FROM: Claire Rogers CR 3/2/21

DATE: March 2, 2021

SUBJECT: Audit Report No. 28007400
Board Monitoring Report; SD-6: Safety

Audit and Quality Services (AQS) received the SD-6 Safety second-half 2020 Biannual Board Monitoring Report and performed the following:

- A review of the information presented in the report to determine the possible existence of material misstatements;
- Interviews with report contributors and verification of the methodology used to prepare the monitoring report; and
- Validation of the reasonableness of a selection of the report’s statements and assertions.

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

CC:

Paul Lau
1. **Background**

Creating a safe environment for employees and the public is a core value of SMUD.

Through continuous improvement, SMUD will be recognized as a leader in employee safety while also assuring the safety of the public related to SMUD operations and facilities. This includes a comprehensive approach to monitoring organizational and public safety performance.

Therefore, SMUD will continue to improve safety results to:

**Workplace Safety**

a) Reduce SMUD’s injury severity rate to 1.4 by 2020, as measured by OSHA’s Days Away Restricted Time (DART), a rate that demonstrates strong safety performance.

b) Provide timely, quality health care for injured employees that aids their recovery while maintaining positive financial performance of the workers' compensation program.

**Public Safety**

a) Track and report injuries to the public related to SMUD operations or facilities.

b) Implement measures to protect the public from injuries related to SMUD operations or facilities.

2. **Executive Summary**

SMUD is in compliance with the SD-6 direction and is in alignment with SMUD’s 5-year strategy of working toward a zero-incident culture. In the second half of 2020, SMUD met its safety performance targets related to SD-6.

**Workplace Safety**

SMUD recorded a total of 57 Occupational Safety and Health Administration (OSHA) Recordables injuries in 2020, which is a 19% increase over the previous year (2019 = 48 OSHA Recordables). Of the 57 OSHA Recordable injuries reported in 2020, 26 met the DART criteria (7 Lost Time & 19 Modified Duty), resulting in a DART rate of 1.24. The majority (92%) of the DART cases occurred in the field environment. Only 9 of the 26 DART cases were soft tissue related.
Although there was an increase in OSHA Recordables injuries compared to 2019, the 2020 injury count remained 50% lower than the average of the years 2004–2019. (See Appendix A). In addition, SMUD did not have a COVID-19 OSHA recordable in 2020.

Quality care of injured employees is measured through the Workers’ Compensation program’s performance, which is assessed annually by an independent actuary. SMUD continues to have a reduction in claims over the past three years, a reduction in injury frequency rates, and a reduction in indemnity benefits as presented below as of September 2020:

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<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td>No. of Claims (Medical &amp; Indemnity)</td>
<td>120</td>
<td>85</td>
<td>88</td>
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<tr>
<td>Incident rate per 100 employees</td>
<td>5.07</td>
<td>3.60</td>
<td>2.3</td>
</tr>
<tr>
<td>Reduction in indemnity benefits</td>
<td>32%</td>
<td>21%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Rates per $100 payroll</td>
<td>.58</td>
<td>.50</td>
<td>.59</td>
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</table>

To better support the health and wellness of employees at work, Workers Compensation contracted with a new onsite medical services provider, Sacramento-OMC to provide non-emergency on-site medical care for our employees who have suffered injuries or illness (caused by work) as well as employee/pre-employment related evaluations and testing. Sacramento OMC has been on site for over a year.

Public and Community Safety

SMUD tracks public and community incidents in the Safety Incident Tracking System (SITS) involving car-pole, electrical contact, dig-in incidents and injuries to the public that are related to SMUD’s operations or facilities.

For 2020, there were 280 incidents where the public vehicles hit SMUD equipment. Of those incidents, there were zero fatalities or hospitalizations caused by the SMUD equipment. Six electrical contacts were reported resulting in one minor shock and one fatality, as well as one claim filed against SMUD. Forty-three dig-ins were reported with zero injuries.

3. Additional Supporting Information

The new SD-6 Safety Direction became effective August 21, 2014. Our goal is to achieve the desired performance objectives by year-end 2020. This report summarizes safety performance in 2020.

Safety Leadership. Continuing in 2020, the new Safety Manager continues with his integration efforts to support Executive Leadership’s 5-year plan that emphasized zero incidents and injuries and a focus on a zero-accident safety culture. SMUD’s Chief
Executive Officer (CEO) Paul Lau re-emphasized the need to improve safety at SMUD with a greater focus of developing a “Safety for Life” culture, reducing the risk of serious injuries and fatalities, implementing a safety management system, and improving the analysis of injury and incident trends. These goals are outlined in SMUD’s new Safety Road Map.

Safety Road Map. SMUD completed its Safety Road Map in December of 2020 with a planned roll-out in early 2021. The Road Map emphasizes a safety for life culture where we support safety leadership, encourage employees to model safety, partner with our contractors, and care for our community.

Safety Management System. SMUD’s new Safety Manager is partnering with IT to finalize the SMUD selection process for the safety software vendor selection. Enhancement areas that the Safety team are working to elevate within core safety competencies include: leadership and staff roles and responsibilities, updating safety standards, field training, change management, human performance engineering, field observations, SCORCH, safe driving, ergonomics, job hazard analyses, contractor safety and public safety improvements.

Safety Standards Development. During 2020, Safety continued the efforts to develop new standards and update existing standards to assist in the improved safety of SMUD operations. Standards ready for Director review include: Bloodborne Pathogens; Confined Space Entry; Excavation, Trenching & Shoring; Fall Protection; General Safety Rules; Heat Illness; and Personal Protective Equipment, to name a few. The completed standards include the New Injury and Illness Prevention Program COVID-19 Appendix; 2020 Wildfire Smoke Update; and Special Motorized Equipment.

Supervisor-Employee Interactions. Safety staff updated and strengthened its supervisor-employee interaction quality program. Improvements included data governance definitions for Supervisor-Employee Interactions, Safety Contacts, Field and Office visits. Emphasis is placed on field visits for work with the highest hazard potential. For office personnel, an emphasis is placed on observing personnel pertaining to ergonomic risk, and slip/trip/fall hazards in walking areas, etc. During 2020, a total of 17,539 Supervisor-Employee interactions were complete that resulted in a percentage observed 167%.

Near Miss Reporting. Leadership continues to support and encourage near miss reporting. The process improvements that were initiated in SMUD’s Safety Incident Tracking System (SITS), provide a method to more effectively track and implement near miss reporting and public incident tracking. The goal of this process is to identify opportunities for learning before injuries and accidents occur. During 2020, SMUD Grid Assets and Power Generation, reported and investigated 50 Near Misses through SITS.

Community and Public Safety. Community and Public Safety efforts have focused on providing awareness messaging to customers and contractors in the Sacramento area.
Partnering with the Marketing Department, SMUD Public Safety messaging campaign has reached audiences on billboards, visual media, and print regarding car pole, excavating, and electrical safety. This messaging was tailored to educate and make aware the public on how to safely avoid interaction with SMUD infrastructure.

Through 2020, SMUD held one public safety outreach session in collaboration with Grid Assets and Sacramento Power Academy (SPA) for Cal Fire that included a technical presentation on how the electrical distribution and transmission system function and a tour of the electrical equipment used for training at SPA. Public safety outreach opportunities have been challenged by COVID-19, with more than 20 training sessions with local emergency personnel, local contractors, local companies, and Sacramento community members being cancelled. SMUD has continued to collaborate with local emergency personnel through development of electrical safety fact sheets for Fire Department Captains to use during fire incident report outs with their respective Fire Departments. Additionally, SMUD Safety and SPA have partnered to develop an electrical safety awareness video for First Responders, which is planned for distribution in early 2021.

**Contractor Safety.** SMUD’s contractor safety program, is continuing to use ISN, as our online contractor pre-qualification and management program that is used in the evaluation of our contractor’s safety record and safety program. at heights, vegetation management, confined spaces, excavations, etc.

SMUD currently has 65 contractors in the ISN program. We continue to network and benchmark with the other utilities, who are using ISN as part of their contractor safety program to further enhance SMUD’s process. As part of the growth we have expanded our site safety evaluations performed on our high-risk contractors, a tool to aid SMUD in validating their safety performance on the jobsites. Last year 61 site safety evaluations were completed, and we are on track to complete 140 for the year of 2020. We are continuing to validate our prequalification criteria and selection processes. SMUD’s prequalification criteria focuses on Contractor Fatality History, OSHA Citation History, DART and Total Recordable Incident Rates (TRIR), Insurance Experience Modification Rate, Safety Culture Questions, and Safety Program Review, to aid in the evaluation of on the safety performance of our contractors.

Procurement and Safety have partnered together working on enhancing SMUD’s contract language as it relates to contractor safety requirements, RFP templates for high risk work, and incorporating contractor safety as part of the onboarding process.

**Safely Conducted Observations Reduce Common Hazards (SCORCH).** For 2020, SCORCH team members conducted 3,583 Office and Professional interactions whereas the SCORCH Field groups employee interactions were 1,546. These interactions resulted in the removal of 3 barriers to safety. The immediate
implementation of remote work called for a quick pivot of our process to allow observation engagement to take place in our traditional peer to peer and an enhanced virtual self-observation format. An updated digital observation sheet was created to elevate the user experience and enhance our ability to timely capture the work behaviors associated with the large numbers of employees now in a work environment. Valuable best practices and trending analysis data was shared with Safety, Facilities, IT and leadership. This was done to aid departments in aligning and prioritizing business practices in ways that best meet the ergonomic challenges of a remote work environment, with data to support the steps.

4. Challenges

Pandemic. The challenge for Safety this year is COVID-19. SMUD safety, HRD&I, Emergency Planning, Facilities and Communications worked to develop new COVID-19 guidance and testing programs to protect employees, contractors, and the public. These efforts resulted in no work-related COVID-19 exposures and limited absenteeism to our employees. During the second half of 2020, SMUD focused on planning for the safe re-entry of employees, and the development of new safety controls and programs for remote workers. Lastly, Safety and our Emergency Planning teams continue to work pre-plan for employee vaccinations. Communication efforts are underway to encourage employees to voluntarily get the vaccine.

Data Management. Improving the quality, automation, and use of safety data is an ongoing challenge. Efforts are underway with SMUD’s IT staff to select a Safety Management System to automate the generation of data and so that Safety can trend recorded incidents using data analytics. In addition, Safety expanded its dashboard reporting and real-time DART, OSHA Recordable, and Preventable Vehicle Accident (PVA) reporting. The new SMS will also allow improved data management of employee suggestions, correction action closure rates, and tailboard status.

Zero Accident Culture. As presented in this report, SMUD continues to work toward a reduction in all incidents. During the past 12 months, SMUD leadership and employees have worked together to build trust and create effective JLMSC Teams, SCORCH (behavior-based) Committees, Safety for Life efforts, contractor safety field visits, and standards/programs. In addition, SMUD has worked closely with contractors conducting high risk work to support the reduction of injuries and incidents to their employees and subcontractors.

5. Recommendation

SMUD is committed to becoming a recognized leader in safety. Both SMUD’s leadership team and employees recognize that to achieve success we must integrate safety into all that we do. SMUD is in compliance with SD-6 and recommends that the Board accept the Monitoring Report for SD-6.
6. Appendices - Business Segment Safety Program Improvement Initiatives

**Grid Assets (GA).** Grid Assets Leadership is continuing to encourage field staff’s input and participation on work group specific Joint Labor Management Safety Committees (JLMSC), with representatives from Field, Supervision, Union and Safety in attendance. The Quarterly Business Segment JLMSC has been expanded to an “All Energy Delivery” Joint Labor Management Safety Committee, to include Power Generation, which allows sharing of ideas and mitigation controls, for similar risks. The first meeting was held on Wednesday, April 29th, 2020, via Skype, due to COVID-19 impacts. The second meeting was held on Thursday, August 13, 2020, (also via Skype). Response from participants has been positive and the value is being recognized.

The Safety Team continues to use TapRooT® to identify causal factors, root causes of Serious Injury/Illness Incidents; and reduce workplace hazards and the potential for repeat incidents.

Safety has continued to work with the SMUD Power Academy, through the COVID Pandemic to review internal and external safety training programs, to ensure consistency and quality. An example of collaboration, teamwork, and a process improvement is recording Safety Meetings and uploading them into LMS, for review by employees who missed their originally scheduled Monthly Safety Meeting. Safety has also worked with the Learning and Development Team on the COVID-19 e-learning courses and updates to provide this important training topic to employees online.

The Safety Team has also assisted various work groups for onsite crew trainings, which have been minimized, due to the COVID-19 social distancing requirements. The Safety Team has worked to create social distancing floor plans for these trainings, provided signage, temperature stations, sanitization, PPE, and other support, as needed.

**Energy Supply/Power Generation (ES).**

Since the beginning of the COVID-19 Pandemic, Power Generation has been flexible in their response to be able to prioritize employee safety while also ensuring that the work is completed. The UARP increased work planning efforts to isolate crews and document work routes in case contact tracing is needed. Gas Pipeline began reporting directly to the field to limit employee to employee contact. Safety meetings including Joint Labor Management Safety Committee, Tailboards, Safety Meetings and Safety Training, including annual crew training, have continued with appropriate modifications to occur virtually, or when an in-person meeting is required social distancing and facial coverings are utilized.

COVID-19 also halted the continuation of the Functional Movement Screens (FMS); however, Power Generation employees continued with their Savvy FIT Daily Dozen for soft tissue injury reduction. As a result, soft tissue injuries continue to trend down. In
addition to the COVID-19 Pandemic, Power Generation has also responded to extreme high heat and wildfire smoke events. Work was planned to ensure that employees were able to reduce or eliminate potential exposures.

Although Cal/OSHA’s Voluntary Protection Program (VPP) program has been limited in its scope and participation due to the COVID-19 pandemic, both the UARP and Gas Pipeline Operations (GPO) continue to pursue best in class improvements. The UARP continues to implement the 2017 arc-flash study recommendations, and has fully implemented the pre-startup-safety review (PSSR) as part of their management of change. UARP has ongoing continuous improvement processes through various avenues, including JLMSC, facilities inspections and new processes to eliminate or reduce hazards. GPO continues to meet in VPP and JLMSC meeting to prepare for the Cal/OSHA audit that will likely be scheduled in 2021 or 2022 due to COVID-19 restrictions.

**Customer & Community Services (CCS).** The Customer Operations Leadership Team safety efforts have continued to emphasize leadership involvement, and employee engagement. Leadership has demonstrated visible involvement through written and verbal communications, as well as through regular supervisory inspections and observations to identify and reinforce the importance of smart set-up of workstations, as well as safe ergonomic behaviors. Employees are taking COVID-19 training and practice their situational awareness training while social distancing, remote work SCORCH observations, and using COVID-19 safe work practices while on SMUD campuses.

**Workforce Enterprise Services (WES).** Workforce Enterprise Services continued efforts to identify and update procedures, and/or work practices for areas of high-risk work. These efforts have been consistently applied through the fleet, warehouse, and facility operations. Other injury prevention efforts have included updating of ergonomic training to address methodologies for self-help for employees to maintain strength, mobility, and conditioning. In addition, the Environmental Services team is also participating in the beta testing of the contractor safety pre-qualification program.

**Driver Safety.** In 2020 the approach to Driver Safety was significantly adjusted due to the impacts of COVID-19. In-cab and in-person instruction and ride along activities such as Driving RODEO’s and Supervisor Ride-a-longs were halted to prevent possible COVID-19 exposure. The van pool program was also suspended for the same reason. Additional adjustments for 2020 include the development and implementation of “virtual” defensive driving refresher training that covers Smith System techniques as well as SMUD related information. Drivers will be offered the opportunity to take the behind the wheel portion of the training when it can be performed safely. Revised refresher training is available through LMS now. Additional educational information in the form of brief PowerPoint Presentations covering various vehicle related topics have been made available on the Health and Safety SharePoint site for the use of business unit supervisors when conducting safety meetings.
Safety for Life. The Safety for Life events scheduled for 2020 were postponed due to COVID-19. To ensure the Safety for Life culture continues to evolve during this time of social distancing and remote work, more emphasis will be placed on Safety for Life communications and testimonials. Safety at a Glance and formal safety meetings will be the primary methods of communication utilized.

Safety Support. As the construction of the HQ project finished up, SMUD Safety conducted a Polychlorinated biphenyls (PCBs) and Volatile Organic Compound air sampling, worked with Environmental Services in completing a PCB risk assessment, and is supporting and reviewing a PCB Close Out report that will be sent to the U.S. Environmental Protection Agency, and is conducting joint safety assessments with RC to ensure that work practices are being performed properly. Safety Services has developed specific work practices; created a work permitting process and develop a Health and Safety Standard for work involving PCBs. In addition, Safety is working Environmental and Substation staff in the construction and sampling of soil at Station G.

Wellness. Employee health and wellness continues to be a priority for SMUD. Wellness is a state of being, evolving from a way of living, that helps individuals achieve their highest potential through the integration of all components of their lives. SMUD promotes wellness through a holistic approach that recognizes all areas of employee health and well-being including physical, financial, emotional, spiritual and social wellness. During 2020, Wellness activities were modified to support employees working remotely through remote wellness programs and activities. These activities focused on improving and supporting physical and mental health, healthy eating, stress, and coping with changes in lifestyle.

In the fall of this year, Safety teamed with HR to support a flu shot campaign for onsite and remote workers. Kaiser provided flu shots at the EC-OC, CSC, and Fresh Pond campuses. In addition, SMUD identified health care facilities and pharmacies that would provide the flu vaccinations.

Health & Wellness realizes the environments in which we live and work, impacts our well-being. SMUD efforts includes employees and their families by empowering individuals to promote and model positive attitudes and behaviors through a lifelong commitment to wellness.
Appendix A

DART Count and OSHA Recordable 2004-2020

![Bar chart showing DART Count and OSHA Recordable 2004-2020](image-url)
RESOLUTION NO. 21-03-04

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

This Board approves the revisions to Board-Staff Linkage BL-8,

Delegation to the Chief Executive Officer and General Manager with

Respect to Procurement, substantially in the form as set forth in

Attachment C.

Approved: March 18, 2021

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The procurement of goods and services is an integral part of SMUD operations. SMUD’s procurement activities shall take place in accordance with the following principles:

a) **Competition:** SMUD’s procurement activities shall be competitive whenever practical.

b) **Direct Procurement:** Direct procurement may be utilized when it is in SMUD’s best interest. Direct procurement is the purchase of goods or services without competition when multiple sources of supply are available.

c) **Sole Source Procurement:** Sole source procurement shall be performed only in the case of emergency or when a competitive process would be an idle act.

d) **Inclusiveness:** SMUD’s procurement practices shall promote inclusiveness of the entire supplier community in its contracting opportunities.

e) **Economic Development:** SMUD’s procurement practices shall promote the economic development of the community we serve.
f) **Environmental Procurement:** SMUD shall minimize the impact on the environment through its procurement practices. In making procurement decisions, staff shall consider the environmental impacts in assessing total cost and benefits.

g) **Responsible Bidder:** SMUD shall only do business with reputable and responsible suppliers. A Responsible Bidder demonstrates trustworthiness, quality, capacity, financial capability, fair labor practices, and experience to satisfactorily perform SMUD work through the bidding and evaluation process. In addition, SMUD will determine Responsible Bidders by considering a supplier’s social, environmental ethical, and safety accountability where applicable.

h) **Best Value Procurement:** SMUD may procure goods and services by the best value at the lowest cost methodology where cost and other factors are used to obtain the maximum value while ensuring a fair and equitable process.

i) **Strategic Alliances:** SMUD may enter into strategic alliance contracts for the procurement of goods or services. A Strategic Alliance is a competitively bid multi-year contract for goods and/or services in which the Supplier and SMUD work collaboratively over the life of the contract to improve quality, and to explore design and process improvements to reduce the cost of production, service delivery, and the total cost of ownership. These benefits are shared both by SMUD and the Supplier.

j) **Supply Chain Risk:** SMUD’s procurement activities shall identify, manage, and mitigate supply chain risks through a coordinated effort across the enterprise.

k) **Protest Policy:** SMUD shall ensure that suppliers are afforded the opportunity to have their grievances heard through a fair protest process.

l) **Delegation of Authority to the Chief Executive Officer and General Manager:** The Chief Executive Officer and General Manager is delegated authority to perform and approve the procurement activities in accordance with the below matrix. This delegation includes the authority to amend contracts for time extensions or other changes that create no additional cost to SMUD.

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
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<td>Operational Inventory</td>
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<tr>
<td>Non-inventory Materials</td>
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<tr>
<td>Construction and Maintenance Services</td>
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<td>Information Technology</td>
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<td>Professional and Consulting Services</td>
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<td>Rents and Leases</td>
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<td><strong>Sole Source:</strong></td>
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<tr>
<td>All types except Maintenance/Licensing Fees</td>
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<td>Maintenance/Licensing Fees approved amount</td>
<td>$3 million or original approved amount</td>
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<td>Materials/Supplies/Services</td>
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<tr>
<td>Government Entities</td>
<td>$1 million</td>
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<tr>
<td>Nonprofit Entities (services/goods)</td>
<td>$1 million</td>
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<tr>
<td><strong>Emergency Procurements:</strong></td>
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<tr>
<td>All types</td>
<td>$2 million</td>
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</table>
Nonprofit Entities:
Memberships/Project Participation Agreement  $3 million

Contingencies:
Board Awarded Contracts  Up to 10% of contract award

Monitoring Method: GM Report
Frequency: Quarterly
WHEREAS, in March 2020, SMUD issued Request for Proposal No. 200009.JM (RFP) to solicit qualified firms to remove and replace existing wood poles on SMUD’s distribution/transmission systems; and

WHEREAS, by Resolution No. 20-06-06, adopted June 18, 2020, this Board awarded a contract to Power Contracting, LLC to provide pole replacement and other line work for a period of two years from June 22, 2020, to June 21, 2022, with two optional one-year extensions, for a total aggregate amount not-to-exceed $46,839,355; and

WHEREAS, Power Contracting, LLC has not been successful in meeting SMUD’s expectations and performance obligations pursuant to the contract; and

WHEREAS, the second highest evaluated proposer from the RFP, Underground Electric Construction Company, LLC, proposed to subcontract a large portion of the primary scope of work to a subcontractor which can be problematic in SMUD’s management of the work because SMUD is not in contract with and does not have direct oversight of subcontractors executing the work, ultimately exceeding SMUD’s risk tolerance for this category of work; and

WHEREAS, Hot Line Construction, Inc. (Hot Line), the third ranked proposer has the capacity to keep production going immediately in response to the unexpected non-performance of Power Contracting, LLC; and

WHEREAS, issuance of a direct procurement contract to Hot Line is in SMUD’s best interests and Hot Line’s pricing is deemed fair and reasonable at approximately 5.5% below market for the initial term of this agreement; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. That the Chief Executive Officer and General Manager, or his designee, is authorized to execute a direct procurement contract with Hot Line Construction, Inc. for pole replacement and other line work for a period of two years from March 22, 2021, to March 21, 2023, with two optional
one-year extensions for a total aggregate contract amount not-to-exceed $51,220,537.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the contract that, in his prudent judgment: (a) further the primary purpose of the contract; (b) are intended to provide a net benefit to SMUD; and (c) do not exceed the authorized contract amounts and applicable contingencies.

Approved: March 18, 2021

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RESOLUTION NO.  21-03-06

WHEREAS, in December 2020, SMUD issued Request for Proposal No. WS2615893830 (RFP) to solicit qualified electrical contractors to provide general line construction work; and

WHEREAS, seven (7) proposals received in response to the RFP were evaluated; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. As a result of such examination, Hot Line Construction, Inc. and Mountain G Enterprises are hereby determined and declared to be the two highest evaluated responsive proposers to provide general line construction work.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of SMUD, to award contracts to Hot Line Construction, Inc. and Mountain G Enterprises to provide general line construction work for a period of two years from March 22, 2021, to March 21, 2023, for a total aggregate contract amount not-to-exceed $20,000,000.

Section 3. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the contracts that, in his prudent judgment: (a) further the primary purpose of the contracts; (b) are intended to provide a net benefit to SMUD; and (c) do not exceed the authorized contract amounts and applicable contingencies.

Approved: March 18, 2021

INTRODUCED: DIRECTOR FISHERMAN
SECONDED: DIRECTOR KERTH
DIRECTOR AYE NO ABSTAIN ABSENT
BUI-THOMPSON X
HERBER X
KERTH X
SANBORN X
WHEREAS, the Federal Energy Regulatory Commission (FERC) license for the Upper American River Project (UARP) requires SMUD to complete a rehabilitation of the West Point and Yellowjacket Campgrounds and Boat Ramps in the Crystal Basin Recreation Area; and

WHEREAS, on November 11, 2020, SMUD issued Request for Proposal (RFP) No. 2701606177 to reconstruct and expand the West Point and Yellowjacket Campgrounds and Boat Ramps; and

WHEREAS, six proposals were received and evaluated; NOW,
THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. As a result of such evaluation, Doug Veerkamp General Engineering, Inc. is hereby determined and declared to be the highest evaluated responsive proposer to complete the rehabilitation of the West Point and Yellowjacket Campgrounds and Boat Ramps.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of SMUD, to award a contract to Doug Veerkamp General Engineering, Inc. to provide construction services for the West Point and Yellowjacket Campgrounds and Appurtenant Boat Ramps Project for a total contract amount not-to-exceed $8,396,902, and for a contract term from April 1, 2021, to January 31, 2022.

Section 3. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the contract that, in his prudent judgment: (a) further the primary purpose of the
contract; (b) are intended to provide a net benefit to SMUD; and (c) do not exceed the authorized contract amounts and applicable contingencies.

Approved: March 18, 2021

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RESOLUTION NO. 21-03-08

WHEREAS, pursuant to Resolution No. 97-04-13 (Section 12), adopted April 17, 1997, this Board authorized the negotiation of customer-tailored contract rates using the unbundled rate components and marginal costs as a foundation, available to customers who meet specified criteria; and

WHEREAS, NTT Global Data Centers Americas, Inc. (formerly RagingWire Data Centers, Inc. and RagingWire Enterprise Solutions, Inc.) (NTT) meets the customer-tailored rate criteria specified in said resolution; and

WHEREAS, by Resolution No. 14-02-02, adopted February 6, 2014, SMUD and NTT entered into a three-year customer-tailored Electric Services Agreement; and

WHEREAS, by Resolution No. 16-01-03, adopted January 7, 2016, SMUD and NTT entered into a five-year customer-tailored Electric Services Agreement, which expires on March 26, 2021; and

WHEREAS, SMUD has negotiated a new four-year Electric Services Agreement (Agreement) with NTT to be effective upon expiration of the prior agreement on March 26, 2021; and

WHEREAS, the Agreement provides NTT a discounted blended rate; and

WHEREAS, the discount rate will be structured as a single-tiered rate, called Base Usage, for 100% of all metered usage at NTT’s two accounts 6375516 and 6375518, corresponding to NTT’s CA1, CA2, CA3 and CA4 datacenter facilities; and

WHEREAS, during the term of the Agreement, SMUD will have exclusive rights to supply electricity to the NTT accounts; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. That the Chief Executive Officer and General Manager, or his designee, is hereby authorized to execute a four-year Electric Services Agreement with NTT Global Data Centers Americas, Inc., substantially in the form of Attachment D hereto.
Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the Agreement that, in his prudent judgment: (a) furthers the primary purposes of the Agreement; (b) are intended to provide a net benefit to SMUD; (c) continue to meet the criteria for customer-tailored contract rates; and (d) does not extend the term of the Agreement.

Approved: March 18, 2021

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INTRODUCED: DIRECTOR FISHERMAN
SECONDED: DIRECTOR KERTH
DIRECTOR AYE NO ABSTAIN ABSENT
RETAIL ELECTRIC SERVICES AGREEMENT
between
NTT GLOBAL DATA CENTERS AMERICAS, INC.
and
SACRAMENTO MUNICIPAL UTILITY DISTRICT

This RETAIL ELECTRIC SERVICES AGREEMENT ("Agreement") is entered into by and between NTT GLOBAL DATA CENTERS AMERICAS, INC ("NTT"), a Nevada corporation, and the SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD), a California municipal utility district.

- RECITALS -

A. NTT, SMUD’s largest private retail customer, is engaged in the business of enterprise data center colocation services with a single or aggregated load in excess of 499 kW each month for three (3) consecutive months, measured as the peak load in the year prior to the establishment of the rate.

B. NTT intends to retain their largest client, with a load of 36 MWs and expects to expand its load by approximately 20-25 MWs during the term of this contract.

C. SMUD is an electric utility engaged in the business of generation, transmission, and distribution of electric power to customers principally in the Sacramento County area.

D. SMUD, through Board Resolution No. 97-04-13, effective June 1, 1997, provided for negotiated Customer-Tailored Rates for commercial and industrial customers.

E. SMUD and NTT currently have a customer-tailored rate agreement (Contract No. K508) which expires March 26, 2021.

F. The Parties desire to enter into this new voluntary, mutually beneficial Agreement, which takes effect upon the expiration of Contract No. K508, for the purpose of describing the customer-tailored rate, terms and conditions associated with the provision of retail electric service to NTT’s facilities.

G. For purposes of Internal Revenue Service regulations applicable to SMUD, this Agreement is considered a retail requirements contract.
- AGREEMENT -

The Parties agree as follows:

ARTICLE 1 – TERM AND SCOPE

1.1 **Term.** This Agreement shall be effective as of the date of last execution by the Parties, (“Effective Date”) and shall continue in effect for four (4) years after the effective date of the Contract Rate (“Contract Rate Term”). The effective date of the Contract Rate Term is March 26, 2021, upon termination of Contract No. K508.

1.2 **Scope.** During the Contract Rate Term, the terms and conditions of this Agreement, including the Exhibits, shall apply to the NTT Account numbers (6378816 & 6378818) associated with the 69kV substation service(s) at facilities/buildings located at the following addresses, all located in Sacramento California, 95834:

1.1.1 1200 Striker Ave. (CA1 substation, SMUD meter number 2513927)
1.1.2 1312 Striker Ave (CA2 substation, SMUD meter number 2516816)
1.1.3 1625 National Dr. (CA3/CA4 substation, SMUD meter number 2521727)
1.1.4 1731 National Dr. (CA3/CA4 substation, SMUD meter number 2512536)

ARTICLE 2 - CONTRACT DOCUMENTS

2.1 **Documents Included.** This Agreement consists of this document, Exhibit A (Definitions), and Exhibit B (Contract Rate Schedule) which are specifically incorporated herein and made a part hereof by this reference.

2.2 **Conflict with Exhibits.** In the event of a conflict between the terms of this document and the terms of any of the Exhibits, the terms of this document shall control.

2.3 **Entire Agreement.** This Agreement constitutes the entire understanding between NTT and SMUD as to the subject matter hereof and may not be modified except by mutual written agreement.

ARTICLE 3 – CONTRACT RATE

3.1 **General.** As further described in Exhibit B, SMUD provides NTT the following monthly Contract Rate during the Contract Rate Term for NTT Account(s):
1. Monthly kWh electricity usage: 100% of all electricity usage as listed in Exhibit B, Table 2, will be billed at the Base Usage rate of:
   a. $0.08481/kWh, Contract Year 1 (March 26, 2021 to March 26, 2022)
   b. $0.09016/kWh, Contract Year 2 (March 26, 2022 to March 26, 2023)
   c. $0.09584/kWh, Contract Year 3 (March 26, 2023 to March 26, 2024)
   d. $0.10188/kWh, Contract Year 4 (March 26, 2024 to March 26, 2025)

2. The Base Plus Usage rate does not apply to this Agreement and may be displayed on the monthly invoices with an Electricity Usage of zero “0” and a Rate equal to the Base Plus Rate in the corresponding contract year.

3. The Hydro Generation Adjustment (credit or charge) will not apply to NTT Account(s).

4. NTT shall be billed the following standard fixed charges based on the GUT_L Rate Category (Rate Schedule GS-TOU1) - rate category/schedule name subject to change - and subject to all SMUD’s Rates, Rules and Regulations, as amended from time to time:
   a. System Infrastructure Fixed Charge
   b. Contract Site Infrastructure Fixed Charge
   c. Power Factor Waiver or Adjustment Charges
   d. Optional “opt-in” programs and services as selected by NTT, e.g. Custom Greenenergy Partner, Energy Tracking Services, etc.
   e. County of Sacramento Utility Taxes
   f. State Surcharge

3.2 Metering. The 69kV electric service, serving NTT’s CA1 substation, CA2 substation, and the CA3/CA4 substation - shall be separately metered. SMUD will aggregate the metered energy usage for CA1&CA2, 2 meters, and create a Campus Billing account (Account # 6375516) and aggregate the metered energy usage for CA3/CA4, 2 meters, and create a separate Campus Billing account (Account 6375518).

3.3 Assumption. The Contract Rate is based on NTT retaining ~36 MW of load from their largest client and the addition of new load of approximately 20-25 MWs at the locations specified under this Agreement during the four-year
term. However, a failure by NTT to retain the ~36 MW, or add a minimum of 20 MWs during the Contract Rate Term shall not change or void any provision of this Retail Electric Service Agreement.

ARTICLE 4 - EXCLUSIVITY

During the Term, SMUD shall, as partial consideration hereunder, have the exclusive right to supply electricity to the NTT Accounts and NTT shall have the obligation to receive and purchase electricity exclusively from SMUD for the NTT Accounts.

ARTICLE 5 - MISCELLANEOUS

5.1 **Status of Parties at Expiration.** At the expiration of this Agreement, NTT may receive electric service under any SMUD rate schedule(s) or contract for which it is eligible. This Agreement shall not be construed as limiting SMUD rate options available to NTT at the expiration of this Agreement. Conversely, this Agreement shall not be construed as creating a right in or expectation of NTT to receive electric service not available to other SMUD customers pursuant and subject to SMUD Rates, Rules and Regulations. Moreover, unless otherwise noted in Article 3, this Agreement shall not be construed as exempting NTT from any generally applicable charges, including without limitation the Power Factor Waiver or Adjustment Charges, System Infrastructure Fixed Charge, Contract Site Infrastructure Charge, State Surcharge, County of Sacramento utility taxes and optional “opt-in” programs and services.

5.2 **SMUD’s Rates, Rules and Regulations.** Except as to matters addressed in this Agreement or which may be reasonably inferred with reference to this Agreement, electric service provided to NTT shall be subject to all SMUD’s Rates, Rules and Regulations, as amended from time to time.

5.2.1 **Priority.** In the event of any direct conflict between this Agreement and SMUD’s Rates, Rules and Regulations, the terms and provisions of this Agreement, as may be amended from time to time, shall control.

5.3 **Notices.** Any notice to be given or any document to be delivered by either Party to the other hereunder may be delivered in person or may be deposited in the United States mail, postage prepaid, or sent by overnight courier with receipt confirmation, email, or by facsimile, if such document is not a notice of default hereunder, with a confirming copy to be delivered by first-class mail, and addressed to SMUD or NTT at the following addresses:
If to SMUD:
Sacramento Municipal Utility District
Damien Waples, Strategic Account Advisor – Account Management and Sales
6301 S Street, MS A102
Sacramento, CA 95817-1899

Telephone Number: (916) 732-5961
Facsimile Number: (916) 732-5162
Mobile Number: (916) 765-3193
Email: Damien.Waples@smud.org

If to NTT:
NTT GLOBAL DATA CENTERS AMERICAS, INC.
Megan Krafka, Vice President of Finance
1200 Striker Ave. Sacramento, CA 95834

Telephone Number: (916) 286-4085
Mobile Number: (916) 367-1556
Email: MKrafka@RagingWire.com and, Legal@RagingWire.com

Either Party may, from time to time, by written notice to the other, designate a different address. Any notice or other document sent by mail shall be deemed delivered on the earlier of actual receipt or two (2) business days after mailing.

5.4 Assignment. Neither Party may assign this Agreement without the express written consent of the other Party.

5.5 Severability. If any provision of this Agreement becomes invalid or unenforceable by decision of a court of competent jurisdiction, or state or federal statute, the remainder of this Agreement which can be given effect without the invalid provision shall continue in full force and shall not be impaired or invalidated.
ARTICLE 6 - SIGNATURE

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized representatives as of the date set forth below.

NTT
NTT Global Data Centers Americas, Inc.

By: _____________________
Name: Meghan Krafka
Title: Vice President of Finance
Date: _________________

SMUD
Sacramento Municipal Utility District

By: _____________________
Name: Paul Lau
Title: Chief Executive Officer and General Manager
Date: _________________

Approved as to form:

By: _____________________
    Jim Lahey,
    Sr. Director of Legal Services,
    NTT Global Data Centers Americas, Inc.

By: _____________________
    Andrew Meditz,
    Counsel for the
    Sacramento Municipal Utility District
Exhibit A
to the
Retail Electric Services Agreement

- DEFINITIONS -

Words or phrases in this Agreement that are initially capitalized shall have the meaning stated below.

“Agreement” means this Retail Electric Services Agreement between NTT and SMUD.

“Base Usage” means 100% of all metered energy usage as listed in Exhibit B Table 2.

“Base Plus Usage” will not be used in this contract but may display on the monthly invoices and will be listed in Exhibit B Table 3.

“Campus Account” means the aggregation of two (2) 69kV meters (2513927, 2516816), at CA1&CA2 and the aggregation of two (2) meters (2521727 & 2512536) at CA3/CA4 for purposes of creating two separate Campus Billing accounts.

“Contract Rate” means the rates structure described in Section 3.1 and meeting the criteria of SMUD Resolution 97-04-03 for negotiated Customer Tailored Rates for commercial and industrial customers.

“Contract Rate Term” means the four (4) year period from the effective date of the new Contact Rate (March 26, 2021) to its expiration on March 26, 2025.

“Contract Year” means the 12-month period starting on March 26 for a given year of the contract.

“Month” means a standard SMUD billing period of 27 to 34 days.

“Parties” means collectively NTT and SMUD.

“Party” means individually NTT or SMUD.

“NTT” means NTT GLOBAL DATA CENTERS AMERICAS, INC.
“NTT Account(s)” means any SMUD 69kV electricity account serving a NTT data center facility in existence as of the Effective Date via CA1, CA2 and CA3/CA4 substations.

“SMUD” means the Sacramento Municipal Utility District, a California municipal utility district.

“Term” means the period of time beginning on the Effective Date and ending on the expiration of this Agreement during which this Agreement shall be effective.
Base Usage Pricing Details - Contract Rate:

1) Base Usage electricity charge per Table 1 below:

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<td>$0.08481 /kWh</td>
<td>$0.09016 /kWh</td>
<td>$0.09584 /kWh</td>
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a) Aggregated electricity usage for the 4 SMUD 69kV meters that qualify for the Base Usage rate per Table 2 below:

Table 2:

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<tr>
<th>Facilities / Account Number</th>
<th>Meter Numbers to be aggregated</th>
<th>Year 1 Mar 26, 2021 to Mar 26, 2022 kWh Bill Base Usage</th>
<th>Year 2 Mar 26, 2022 to Mar 26, 2023 kWh Bill Base Usage</th>
<th>Year 3 Mar 26, 2023 to Mar 26, 2024 kWh Bill Base Usage</th>
<th>Year 4 Mar 26, 2024 to Mar 26, 2025 kWh Bill Base Usage</th>
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<tbody>
<tr>
<td>CA1 &amp; CA2 6375516</td>
<td>2513927 2516816</td>
<td>100% of all metered kWh electricity usage</td>
<td>100% of all metered kWh electricity usage</td>
<td>100% of all metered kWh electricity usage</td>
<td>100% of all metered kWh electricity usage</td>
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<tr>
<td>CA3/CA4 6375518</td>
<td>2521727 2512536</td>
<td>100% of all metered kWh electricity usage</td>
<td>100% of all metered kWh electricity usage</td>
<td>100% of all metered kWh electricity usage</td>
<td>100% of all metered kWh electricity usage</td>
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2) Base Plus Usage electricity charge does not apply in this contract but may display on the monthly electricity charge invoice with an Electricity Usage as zero (0) and a rate equal to the Base Usage rate in the corresponding contract year.

3) Monthly System Infrastructure Fixed Charged based on the GUT_L Rate Category (Rate Schedule GS-TOU1)

4) Contract Site Infrastructure Charge Based on the GUT_L Rate Category

5) Power Factor Waiver or Adjustment Charges

6) Hydro Generation Adjustment will not apply to the Base Usage

7) Optional “opt-in” programs and services, e.g. Greenergy, Energy Tracking Services, etc.

8) Applicable County of Sacramento utility taxes and State Surcharge

9) SMUD will aggregate the metered energy usage from all 4 meters listed in Table 2 and create two (2) Campus Billed Accounts. Account 6375516 will correspond to CA1&CA2 and Account 6375518 will correspond to CA3/CA4.
President Bui-Thompson then turned to Informational Items 12 and 13 and stated that any public comment on informational items could be provided during the general public comment period.

Lisa Limcaco, Director of Accounting & Controller, gave a presentation on agenda item 12, regarding SMUD’s financial statement through January 31, 2021. A copy of the slides used in her presentation is attached hereto.

Jennifer Davidson, Chief Financial Officer, gave a presentation on agenda item 13, a summary of SMUD’s current Power Supply Costs. A copy of the slides used in her presentation is attached hereto.

President Bui-Thompson then turned to agenda item 14, statements from the public regarding items not on the agenda. She stated that in accordance with the Emergency Board Meeting Procedures, public comment for items not on the agenda would be provided to the Board electronically and placed into the record if received within two hours after the meeting ended. No public comment was received.

President Bui-Thompson then turned to Directors’ Reports.

Vice President Rose reported on his attendance at a Clean Start Meetup where Director Sanborn was a panelist and did a wonderful job of summarizing the state of recycling and clean tech. He then reported on his participation in the groundbreaking for the SMUD-funded shade structure at the Zittel Family Amphitheatre in historic Folsom.

Director Fishman reported on his participation in annual meetings members of SMUD’s congressional legislative delegation during the American Public Power Association (APPA) annual Legislative Rally. He stated Congressmembers Matsui, McNerney and Garamendi were all very gracious. He thanked staff for their work and preparation of the 2030 Zero Carbon Plan.

Director Herber reported on her participation in the APPA Legislative Rally and thanked staff for coordinating. She then reported on her attendance at the Sacramento Asian Chamber of Commerce dinner where President Bui-Thompson had provided introductory comments. She reported on
her attendance at the Coalition for Clean Air, a Black History event provided by the Black Chamber of Commerce, and her participation in the Read Across America event. She then thanked Jamie Dickinson and President Bui-Thompson for their efforts in making the new child care center available.

Director Kerth thanked staff for their work on the 2030 Zero Carbon Plan. He then reported on his participation in helping out with a vaccination clinic held at Grant High School in Del Paso Heights where his fellow Directors had also volunteered, but which was largely organized by President Bui-Thompson. He thanked them for their participation and for the opportunity to help.

Director Fishman thanked Director Kerth for mentioning the clinic and extended his thanks as well.

Director Tamayo thanked President Bui-Thompson for her leadership at the Grant High School vaccination events and then reported on his participation in clinics held in his Ward at the Pannell Meadowview Community Center organized by Sacramento City Councilmember Mai Vang and at the Maple Neighborhood Center on Franklin Boulevard organized by La Familia. He then reported on his participation in the APPA Legislative Rally and stated he had heard from many constituents in his Ward about the 2030 Zero Carbon Plan and their appreciation for it.

Director Sanborn thanked President Bui-Thompson for the vaccine clinic and for providing the opportunity to volunteer at it. She reported on the positive feedback she received on the 2030 Zero Carbon Plan, as well as her conversation with Nikolas Runge regarding electric vehicle (EV) charging and the energy audit at the Aerospace Museum as they “green up” the museum. She then reported on her meeting with State Treasurer Fiona Ma and Sacramento Regional Transit regarding attracting new investment to the Sacramento area for EV charging. She closed by reporting on her participation in the Child Abuse Prevent Center’s Quizzing for a Cause virtual event and stating that this is a very stressful time for many, with children often bearing the brunt, and children must be protected.
President Bui-Thompson reported on her work with Dr. Kawanaa Carter coordinating the COVID vaccination clinic at Grant High School in Del Paso Heights. She stated that although it was not SMUD-related, she appreciated the support of SMUD employees and Mr. Lau in providing their time to volunteer. She then reported on her attendance at the Black Chamber’s Facebook Live event celebrating Women’s History Month, as well as the Sacramento Asian Chamber Awards virtual event for which she was able to record a message.

Paul Lau, Chief Executive Officer and General Manager, thanked President Bui-Thompson for her leadership in coordinating the vaccine clinic, and he thanked the Board for acknowledging the hard work staff had done in getting the draft of the 2030 clean energy vision. He then reported on the following items:

1) **Atlanta Shootings.** I want to start tonight’s report acknowledging the tremendous hurt, anger and horror among our Asian community. I, like so many others, was horrified to learn that eight people, six of them Asian Americans, lost their lives to shootings at three Atlanta-area spas. We have all seen the headlines about an increase in violence and hate crimes toward Asian-American communities during the coronavirus pandemic. The organization “Stop AAPI Hate” released statistics showing that more than two-thirds of all hate incidents against Asian and Pacific Islanders are directed toward women, and 45 percent of all incidents nationwide have occurred in California. I know our employees are hurting. Some of them brought Tuesday’s shootings up at my All Hands meeting earlier today. For me personally, as an Asian-American, my heart hurts. So many in our Asian communities are hurting. Along with the pain and hurt, I am hopeful. The widespread awakening on race and other deep-rooted issues fills me with hope and optimism that we can, and will, do better. As I shared
with our employees yesterday, I firmly believe we, as humans – in our personal lives and here at SMUD – can have tough conversations, learn from each other and right the wrongs of the past. Racism in all its forms must be eradicated. Our Board and executive team are completely aligned in our commitment to pursuing diversity and inclusion in everything we do at SMUD and will continue to work hard to be part of the solution.

2) **Emergency Utility Workers Now Eligible for Vaccination.** A big thanks Chief Workforce Officer Gary King and his team that now that we have been working to prioritize COVID-19 vaccination based on our business continuity plans, with the focus on employees who are essential to keeping the lights on and other critical work. I am pleased to report that some of these SMUD employees have been moved up in phased priority from Phase 1C “Energy Workers” to Phase 1B “Emergency Utility Workers” by Sacramento County Public Health. Our employees have been getting vaccinated at the Cal Expo location, so thank you very much. I know how hard Gary and his team have worked to get our employees up the priority list to get vaccinated.

3) **SMUD Extends Moratorium on Power Shutoffs.** With many of our customers continuing to struggle with financial hardships due to the pandemic, SMUD recently further extended the suspension of power shutoffs for non-payment through June 30, 2021, at the earliest. Customers who are behind on their payments will still owe SMUD for service but will not lose power or accrue any late fees on their bills. We are letting customers know of the ways we are supporting them through payment arrangements and other means. SMUD first announced the suspension of customer disconnections for non-payment on March 13, 2020, shortly after the pandemic hit the United
States. We will continue to monitor the situation as vaccinations become more prevalent and health officials relax restrictions on public gatherings and workplace safety.

4) **California Mobility Center Update.** The California Mobility Center shifted from its pre-launch phase to full commercial operations a few weeks ago. SMUD is a founding member of the California Mobility Center, or CMC, which helps companies develop and commercialize products and technologies in the e-mobility world. The CMC announced earlier this month the makeup of its 12-member Board of Directors. I am honored to serve on the CMC Board, which is chaired by my predecessor as SMUD’s CEO & General Manager, Arlen Orchard. The CMC’s headquarters is located at Army Depot Park in Sacramento.

5) **Board Video.** Tonight’s Board video provides a close-up view of a SMUD snow survey in SMUD’s Upper American River Project (UARP). We are hoping for more rain and snow before the weather heats up. Fresh Pond precipitation through Wednesday morning was 26.53 inches, or 61 percent of the historical average to date. The snowpack is 46 percent of what it usually is by this date.

Mr. Lau announced that Michael MacDonald, the SMUD Hydrography Foreman featured in the video, was in attendance and thanked him for his work.

Director Sanborn briefly mentioned that she and Mr. Lau had spoken offline regarding the addition of female representation on the CMC Board, and she wanted to make the public aware that it was in progress.

Mr. Lau confirmed there was an active recruitment, and he would report back to the Board once information was available.

President Bui-Thompson requested the Summary of Board Direction, but there were no items.
No further business appearing, President Bui-Thompson adjourned the meeting in honor of Simon Chan at 6:23 p.m.

Approved:

_________________________  _____________________________

President    Secretary
Exhibit to Agenda Item #12
Provide the Board with the financial results from the one-month period ended January 31, 2021.

Board of Directors Meeting
Thursday, March 18, 2021, scheduled to begin at 5:30 p.m.
Virtual Meeting (online)
January 2021 YTD – Change in Net Position

(Thousands of dollars)

- YTD customer sales – over target
  - Customer sales $7M over budget primarily due to higher rates
  - Offset by increase in bad debt expense of $2M
- Variance of purchased power and production cost – net $0.2M under budget
- Other Operating cost - $3M under budget
- Change in net position - $9M over budget

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total customer sales</td>
<td>$104,621</td>
<td>$99,683</td>
<td>$4,938</td>
</tr>
<tr>
<td>Other operating revenues</td>
<td>$2,871</td>
<td>$2,959</td>
<td>$(88)</td>
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<tr>
<td>Net transfer from rate stabilization fund</td>
<td>$936</td>
<td>-</td>
<td>$936</td>
</tr>
<tr>
<td><strong>Total operating revenues</strong></td>
<td><strong>$108,428</strong></td>
<td><strong>$102,642</strong></td>
<td><strong>$5,786</strong></td>
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<tr>
<td>Net purchased power</td>
<td>$20,377</td>
<td>$16,356</td>
<td>$4,021</td>
</tr>
<tr>
<td>Net production</td>
<td>$20,595</td>
<td>$24,806</td>
<td>$(4,211)</td>
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<tr>
<td>Transmission and distribution</td>
<td>$15,834</td>
<td>$14,051</td>
<td>$1,783</td>
</tr>
<tr>
<td>Other operating costs</td>
<td>$44,606</td>
<td>$48,059</td>
<td>$(3,453)</td>
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<tr>
<td><strong>Total operating expenses</strong></td>
<td><strong>$101,412</strong></td>
<td><strong>$103,272</strong></td>
<td><strong>$(1,860)</strong></td>
</tr>
<tr>
<td><strong>Net operating income</strong></td>
<td><strong>$7,016</strong></td>
<td><strong>$(630)</strong></td>
<td><strong>$7,646</strong></td>
</tr>
<tr>
<td>Total non-operating revenues</td>
<td>$2,998</td>
<td>$1,942</td>
<td>$1,056</td>
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<tr>
<td>Total non-operating expenses</td>
<td>$9,630</td>
<td>$9,487</td>
<td>$143</td>
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<tr>
<td><strong>Change in Net Position</strong></td>
<td><strong>$384</strong></td>
<td><strong>$(8,175)</strong></td>
<td><strong>$8,559</strong></td>
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</tbody>
</table>
January 2021 YTD – Energy Sources & Uses

Sources of energy

- Hydro – 63% under budget
- JPA – 22% under budget
- Purchased Power (net of surplus power sales) – 80% over budget

YTD customer usage 3% over target
Exhibit to Agenda Item #13
Provide the Summary of SMUD’s current Power Supply Costs.

Board of Directors Meeting
Thursday, March 18, 2021, scheduled to begin at 5:30 p.m.
Virtual Meeting (online)
Precipitation Levels

<table>
<thead>
<tr>
<th>Month</th>
<th>Plan</th>
<th>Actual</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td>Oct-20</td>
<td>2.13&quot;</td>
<td>0.00&quot;</td>
<td>-2.13&quot;</td>
</tr>
<tr>
<td>Nov-20</td>
<td>7.61&quot;</td>
<td>5.30&quot;</td>
<td>-2.31&quot;</td>
</tr>
<tr>
<td>Dec-20</td>
<td>7.45&quot;</td>
<td>6.08&quot;</td>
<td>-1.37&quot;</td>
</tr>
<tr>
<td>Jan-21</td>
<td>9.29&quot;</td>
<td>8.18&quot;</td>
<td>-1.11&quot;</td>
</tr>
<tr>
<td>Feb-21</td>
<td>8.49&quot;</td>
<td>5.09&quot;</td>
<td>-3.40&quot;</td>
</tr>
<tr>
<td>Total</td>
<td>34.97&quot;</td>
<td>24.65&quot;</td>
<td>-10.32&quot;</td>
</tr>
</tbody>
</table>

March 18, 2021

Board of Directors Meeting
SMUD has in place financial mitigation tools that hedge against hydroelectric uncertainty

- HRSF Balance - $74.7M
- WY (Apr20-Mar21) forecasted withdrawal $13.3M
- RSF WAPA Balance - $44.7M
  - 2021 forecasted transfer out of the WAPA RSF $6.1M

### 2021 Commodity Costs Forecast vs. Budget (in millions)

<table>
<thead>
<tr>
<th></th>
<th>Forecast</th>
<th>Budget</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td>$</td>
<td>426</td>
<td>441</td>
<td>$(15)</td>
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</tbody>
</table>

### Hydro Performance as February 28, 2021

<table>
<thead>
<tr>
<th></th>
<th>Forecasted (GWh)</th>
<th>2021 Budget (GWh)</th>
<th>Variance (GWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UARP</td>
<td>1,177</td>
<td>1,558</td>
<td>-380</td>
</tr>
<tr>
<td>WAPA</td>
<td>533</td>
<td>661</td>
<td>-128</td>
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<tr>
<td>UARP + WAPA</td>
<td>1,710</td>
<td>2,219</td>
<td>-508</td>
</tr>
</tbody>
</table>
The Board of Directors of the Sacramento Municipal Utility District met in special session via virtual meeting (online) at 5:31 p.m.

Roll Call:

Presiding: President Bui-Thompson
Present: Directors Rose, Fishman, Herber, Kerth, Tamayo, and Sanborn

Present also were Paul Lau, Chief Executive Officer and General Manager; Laura Lewis, Chief Legal Officer and General Counsel and Secretary, and members of SMUD’s executive management; and SMUD employees and visitors.

President Bui-Thompson called for approval of the agenda. Director Herber moved for approval of the agenda, Director Kerth seconded, and the agenda was unanimously approved.

President Bui-Thompson then turned to Informational Item 2, the 2030 Zero Carbon Plan, and noted that Mr. Lau would provide some introductory comments before the presentation.

Mr. Lau stated that the Zero Carbon Plan escalates SMUD’s commitment to environmental stewardship and sustainability. He stated it had occurred in three steps: i) in 2018, SMUD staff developed, and the Board approved, a 2040 energy plan that committed SMUD to spending $7 billion over the next 20 years to achieve a net-zero greenhouse gas position by 2040; ii) the Board adopted the Climate Emergency Declaration in July 2020 that committed SMUD to the even more aggressive goal of achieving carbon neutrality by 2030 -10 years earlier than the plan approved by the California Energy Commission; and iii) the introduction of SMUD’s 2030 Clean Energy Vision, which he had tasked the entire organization with developing a road map that gets us to zero carbon emissions by 2030. He stated the Board’s leadership on this important issue has been instrumental in SMUD cementing an industry leading position on carbon reduction.
He then stated that SMUD would need the support of a wide range of players and would require that SMUD take bold actions and pioneer new game-changing technologies. He stated that SMUD would be focusing on four main areas:

- Proven and clean technologies;
- New business models and partnerships;
- The retooling and retirement of our natural gas plants; and
- Regulatory and financial strategies.

He closed by thanking the Board for its visionary leadership and SMUD staff for their professionalism and passion in helping turn the Zero Carbon Vision into an actionable plan.

Scott Martin, Interim Chief Grid Strategy and Operations Officer, Ross Gould, Director of Power Generation, Rachel Huang, Director of Energy Strategy, Research & Development, and Russell Mills, Director of Risk Management & Treasurer, gave a presentation on agenda item 2, the SMUD 2030 Zero Carbon Plan. A copy of the slides used in their presentation is attached hereto.

Directors Fishman commended staff for their work in putting the plan together, especially given the many unknowns in the future of energy. He stated that it would be important to keep reliability and cost at the forefront as well. He asked staff to comment on why the plan does not specifically contain concentrated solar and thermal storage.

Mr. Gould stated it was a viable technology and that it is one of the options the team was considering for long duration energy storage. He stated that from a price basis, it does not compete with photovoltaic (PV) energy, but it does compete from a storage standpoint because the energy may be saved during the day and expended at night.

Director Rose stated he agreed with Mr. Gould’s assessment. He then asked what the capacity factor would equate to when reducing the operating hours of the power plants by 90% and if any of the current bio resource contracts could be used toward operating the plants.
Mr. Gould stated the plants were historically run 40-60% depending on the water year, so a 90% reduction would be an overall capacity of probably 3-5% which means the units would be online between 100-103 hours per year. In response to the second question, he stated the team was considering a theory where some of the gas from the digesters and landfills would be stored over time in a natural gas storage contracted facility so that it could be used in a large quantity so that the capacity factor requirement would still be met with that renewable natural gas.

Director Herber commended the Board for making the decision to adopt the Climate Emergency Declaration and staff for creating a roadmap to zero carbon. She stated she was looking forward to more engagement and refinement and asked staff to provide information on reducing heat pollution through the use of cool pavements and roofs.

Ms. Huang stated staff was working on a Board memo that would delve into a number of things that staff is actively exploring on that front.

Director Sanborn thanked Mr. Lau for taking on the challenge to create the plan and praised all who worked on the plan. She stated she was eager to hear from the public on the plan. She stated this was just the beginning, and the plan would evolve as new information and technology becomes available.

Vice President Rose inquired about exposure to transmission cost drivers and outside entities that SMUD interacts with on day-to-day operations.

Mr. Lau stated SMUD operates with a balancing authority, so it is not as exposed as investor-owned utilities (IOUs). He stated SMUD still has a separate transmission corridor to the northwest and are also hooked in with the California Independent System Operator (CAISO). He stated other considerations are currently being examined and a panel would be scheduled for an upcoming Board Committee meeting.

Vice President Rose inquired about rates considerations.

Mr. Lau replied that staff was currently working on recommendations and would be briefing the Board shortly.
Vice President Rose asked if there was a central location where all information is available.

Ms. Huang stated work was in progress and the implementation plan would be comprehensive.

Director Tamayo thanked Mr. Lau for his leadership in accepting the challenge and stated he appreciated the flexibility of the plan and that disadvantaged communities were not left behind. He stated he looked forward to the public’s participation in moving forward with the plan.

Fred Morse, President of Morse Associates, Inc., former Senior Executive in the Department Energy, and former Senior Advisor at Abengoa Solar, read portions of his written statement. A copy of his full statement is attached to these minutes.

Bill Magavern, Policy Director for the Coalition for Clean Air, stated the plan was impressive and well thought out. He stated that from an air quality and environmental justice perspective, the key would be the shutdown and conversion of the gas fired power plants. He provided general feedback and asked that the electrification of small, offroad engines be added to the plan.

Inga Olson stated she was proud that SMUD had taken such a bold move the plan, but she did not understand why the plan does not include aggressive encouragement to install solar panels with storage batteries on homes. She asked SMUD to partner with the City and County of Sacramento to educate the public on climate issues.

Public comment was received and read into the record regarding agenda item 2, copies of which are attached to these minutes, from the following members of the public:

- Carter Nelson, Sacramento Association of REALTORS®
- Douglas MacPherson
- Ed Smeloff
- Jane Lamborn
- Ann Amato
- Chris Brown
- Lee Miller

Director Sanborn stated there would be some more work to do in terms of rooftop and battery storage and what the right amount and speed would
be. She stated that if there was an option to retool the gas plants to have greener fuel that addresses air quality and carbon issues, she would love to hear about it.

Vice President Rose stated there were a lot of policies and it would be helpful to have a tool to compare policies.

Director Kerth stated the plan prepared by staff appeared to meet the mandates the Board had laid out, and he thanked staff for remembering that all of the Board’s policies and objectives are equally important. He reiterated the importance of reliability and thanked staff for working to create the roadmap to zero carbon.

Azizza Davis Goines, President of the Sacramento Black Chamber of Commerce, stated the approach to the communities that we serve is excellent, but she was concerned that the presentation was a little too technical to reach the community. She encouraged SMUD to create a presentation that would provide information in a way that keeps the community engaged and asking questions.

Director Herber stated that the Communications team would be taking the content and putting it into a form that was more understandable.

Director Tamayo stated the importance of the Board being fully committed to recruiting help from their Wards and listening to ideas.

Director Fishman stated he wanted to address a comment suggesting partnerships with the City and County. He clarified that partnerships are a part of the plan but were not specifically articulated in the presentation. He stated he wanted to notify the public that there is the intention to partner with the City and County of Sacramento and others.

President Bui-Thompson thanked staff for their work and the public for their comments. She stated the presentation was not as Board- or public-friendly as she would have liked to have seen, and she said it would be crucial to get buy-in and attract partners via communications that make them want to get on board.
Director Sanborn stated the plan is one that will require planning, doing, checking, and adjusting.

Mr. Lau thanked the Board for having the vision to inspire staff to take bold action and thanked staff for their hard work to-date and the hard work that they would continue to put into the plan. He stated the last day to submit comments related to the plan is April 16, 2021.

President Bui-Thompson then turned to agenda item 3, statements from the public regarding items not on the agenda. She stated that in accordance with the Emergency Board Meeting Procedures, public comment for items not on the agenda would be provided to the Board electronically and placed into the record if received within two hours after the meeting ended. No public comment was received.

No further business appearing, President Bui-Thompson adjourned the meeting at 7:47 p.m.

Approved:

_________________________  _____________________________
President                 Secretary
Exhibit to Agenda Item #2

Present the **2030 Zero Carbon Plan** for discussion and receive public comments.

Special Board of Directors Meeting
Wednesday, March 31, 2021, scheduled to begin at 5:30 p.m.
Virtual Meeting (online)
Flexible pathway to zero carbon

Goal to retire 2 power plants in 2024-2025 and re-tool fleet
to drastically reduce operations and emissions.

90% reduction of greenhouse gas emissions*
>3,000 MW of new renewable energy & storage –equivalent to energy needs of more than 600,000 homes.
Growing rooftop solar and batteries.

Pilot & scale new projects & programs
Research game changing technologies and alternative fuels.

Rate impacts limited to rate of inflation
Expand partnerships and grants to offset costs & generate operational efficiencies.

Work with all our communities to reduce greenhouse gas emissions together. Partner and collaborate with community organizations, attract business, innovation and jobs to Sacramento.

Alignment with SMUD’s Sustainable Communities Initiative.

* ~ 1.8 million metric tons per year

March 31, 2021
Special Board of Directors Meeting
Extensive outreach & engagement

7 stakeholder workshops

3 Customer & Community meetings
- 400 customers
- 336 surveys completed (Dec. 2020)

3 expert panel discussions @ Board Committee meetings
- 11 experts

smud.org/ZeroCarbon & ZeroCarbon@smud.org
- FAQs
- Meeting recordings
- Opt-in for updates
- Video
- Email for feedback

Listserv notification emails
- Proactively customer notification of upcoming zero carbon meetings

Presentations
- External presentations by Board members, CEO & other key staff

CEO communications
- Video blogs
- All hands employee meeting
- Workgroup meetings

Employee resources
- SharePoint site
- Talking points
- 2 Brown bag learning sessions
- 15+ Intranet news stories & updates

Innovation leadership
- Innovation Leadership Team
- Call for employees’ innovative ideas
- Centralized hub for idea vetting

Tailored workgroup presentations
- Project team leads @ staff roundtables
- Q&A session

External Internal

March 31, 2021 4 Special Board of Directors Meeting
A flexible pathway with a firm commitment

2020

2021-2023: Least flexibility, least risk
- Resource mix known.
- New Tech needs to be proven & piloted.
- Risks well known and hedged (costs/rates, regulatory, markets etc.).

2024-2026: More flexible, more uncertainty
- Resource tradeoffs - distributed resources, renewables, conventional plants.
- New Tech tested and beginning to scale.
- Risks are less known (resource prices, regulatory, markets, etc.).

2027-2030: Most flexible, least certain
- Resource tradeoffs - distributed resources, renewables, conventional plants, new tech.
- New Tech is proven and operational
- Risks are less clear (resource prices, regulatory, markets, etc.).

Achieving the last 10% is a major challenge!
Natural gas generation repurposing
Repurpose natural gas generation to:
Eliminate the use of fossil fuels in SMUD’s power plants.

**Research**
- Reliability impact studies.
- New technologies to phase out the last 10% of GHG.

**Plan**
- Target retirement of 2 plants & re-purpose 2 plants for infrequent use to meet peak load and eliminate use of natural gas.

**2024**
- Retire McClellan
- Pending refinement of reliability assessments

**2025**
- Retire Campbells

**2027**
- Retool Carson
  - Convert to Standby Operation
  - (90% reduction in operating hours)

**2029**
- Retool Procter
  - Convert to Standby Operation
  - (90% reduction in operating hours)

**2030**
- Cosumnes
  - Keep as combined cycle. Prioritize Clean Fuels

**Pursue clean fuels to completely eliminate natural gas use**

**Dependent on Clean Tech, New Tech / Distributed Resources**
Research plan: New large-scale technologies

- **Thermal/battery hybrid.** Enables plants to be online without burning fuel. Relatively mature today.
- **Clean fuels.** Research renewable natural gas and other zero or low carbon alternative fuels. Partnerships and grants will be critical.
- **SMUD pumped storage.** Research, design and potentially develop new pumped storage hydro with existing SMUD hydroelectric assets.
- **Long duration storage.** Research and pursue partnerships and grants (electrothermal energy storage, liquid air energy storage, etc.).
- **Pre-combustion carbon capture.** Investigate Allam-Fetvedt cycle for CCS and explore venture partners and grants.
- **Green hydrogen.** Feasible in some of our plants but expensive and supply chain is unknown. Plan to follow development and be ready to invest if costs come down – major grant support or technology breakthrough needed.
- **Post-combustion carbon capture & storage.** Feasible and relatively proven technology but requires major capital investments on top of our aging plants.

Success with these new technologies will alter the need & timing for other resources.
### Natural Gas Generation Repurposing

#### Industry outreach
(utilities, manufacturers, research institutions)

<table>
<thead>
<tr>
<th>Year</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
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</thead>
<tbody>
<tr>
<td>McClellan</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Carson</td>
<td></td>
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</tbody>
</table>

- **Comprehensive detailed analysis**
  - 2021: Detailed analysis

- **Industry outreach**
  - 2022: Industry outreach
  - 2025: Retire
  - 2026: Add Solar and Battery Storage
  - 2027: Pending refinement of reliability & replacement studies
  - 2028: Conversion to Standby Operation*  
    - 90% reduction in operating hours
  - 2029: Conversion to Standby Operation*  
    - 90% reduction in operating hours
  - 2030: Investigate RNG biomethane, hydrogen, long duration energy storage for post 2030 retool solution

*Note: Assumes 3 years for plant conversion, including conceptual design, permitting, detailed design, procurement and construction.

Retirements, retooling, renewable fuels and reduced utilization will dramatically reduce emissions.

March 31, 2021  | Special Board of Directors Meeting
Proven clean technologies
Expand existing technology to:
Increase the amount of our electricity supply served by carbon free resources.

Resource diversity is critical

By 2030, build up to **3.5x** the amount of **renewables & battery** we have today.

~ 1,100 to 1,500 MW new local utility PV
~ 700 to 1,100 MW local batteries
~ 300 to 500 MW wind
~ 100 to 220 MW geothermal
~ 100 MW regional solar

**Behind the meter resources**
~ 500-750 MW solar
  (add. ~30 to 55 MW per year)
~ 50-250 MW battery storage
  (add. ~6 to 30 MW per year)

**New utility-scale renewables equivalent to energy needs of >600,000 homes**
### Additional analysis & research needed to firm up resource plan:

- **Siting**: Local utility solar & storage siting and interconnection studies.
- **Delivery options**: Of non-local renewables (transmission, market rules/participation, accounting, costs)
- **Low hydro impacts**: Normal hydro generation assumed for the study; low hydro scenario to be assessed.
- **Beyond 2030 impacts**: We need to study impacts of this plan past 2030 (load growth by 2040).
- **Reliability**: Further in-depth reliability studies needed.

---

### Proven Clean Tech Investment Overview

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<thead>
<tr>
<th>Resource</th>
<th>2021</th>
<th>2022</th>
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<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
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<tbody>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td>600-1,000 MW</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>300-500 MW</td>
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<td>Regional geothermal</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100-220 MW</td>
</tr>
<tr>
<td>Rooftop Solar</td>
<td>(30-55 MW per year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>500-750 MW</td>
</tr>
<tr>
<td>Behind-the-meter batteries</td>
<td>(6-30 MW per year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50-250 MW</td>
</tr>
</tbody>
</table>
New DER technologies, business models
What is a Distributed Energy Resource (DER)?

A small modular generator, storage or behavioral resource that’s installed behind the customer meter or directly connected to SMUD’s system. Customer-owned examples include:

- Rooftop solar
- Energy storage
- Flexible demand
- Building electrification
- EVs
- Energy efficiency
Electrification & decarbonization to:
Help our region and customers partner with SMUD to reduce greenhouse gas emissions.

- **Continue** foundation of energy efficiency

- **Pilot** innovative programs to strengthen customer investments in **zero carbon solutions**, including:
  - Electrifying Multifamily Retrofit, Schools, Commercial, and Underserved Communities
  - New Construction Smart Homes
  - Financing Options
  - Turnkey EV Charging Solutions for Residential & Commercial
  - Incentives for Used EVs

- **Engage with customers and community organizations** to further develop and implement zero carbon solutions, including ways to **bring economic vitality to our region**.

- **Seek external funding through grants and focus regional efforts through partnerships** to accelerate market transformation for the region.

**Continuous refinement of targeted plan to 2030.**
Education & demand flexibility to:
Help our region and customers partner with SMUD to reduce greenhouse gas emissions.

Plan

- Educate customers and community organizations on how they can play a role toward zero carbon.
- Pilot behavioral-based demand response and flexibility such as “Flex-Alert” to help reduce customer bills and system peak demand without requiring investment in technology.
- Assess pilots and programs to ensure alignment with zero carbon goals.

Research

- Customer & market research to develop solutions.
- Pilot Flex Alert programs to offset capacity needs without technology requirements.
- Pursue education and behavior-based opportunities.

80 MW

2020 Flexible Demand Programs

Up to 230 MW

2030 Flexible Demand Programs
Virtual Power Plants (VPPs) & Vehicle-to-Grid

Support the elimination of fossil fuels in SMUD’s electricity supply.

**Plan**

Partner directly with customers or third-party providers to pilot and then scale up solutions where customer-owned devices help manage the grid.

**Research**

Identify VPP partners to develop & test customer offerings.

Assess VPPs relative to alternatives to determine operational scale.

- Assess ability of **customer-installed devices** such as thermostats, pool pumps, water heaters to be aggregated into VPPs.

- **Pilot Bring Your Own Device (BYOD)** using multi-DER approach that aggregate a variety of customer-owned devices including thermostats, EV Charging to manage load.

- **Pilot Solar & Storage VPP** to test ability to deliver grid-type scale and services such as capacity and short-term energy.

- Pilot and scale **Vehicle-to-Grid (V2G)**.

- Develop **scaling** models and prioritize.

---

**DER Capacity Contributions Expected by 2030**

Adjust depending on pilot results and development in Proven Clean Tech and Natural Gas Repurposing.
## DERs and New Business Models

### Electrification & decarbonization

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### DER technology

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*High DER Potential includes 66MW of behavioral DR in 2030.
Financial
Financial considerations to:
Help facilitate an affordable and inclusive zero carbon future.

Plan

1. Identify **savings and cost reduction opportunities** to offset expected costs for Zero Carbon solutions.
2. Seek **grants and other funding opportunities** for new technologies to keep rate increases manageable.
3. **Partner** with local, state and federal governments to showcase new technologies and solutions under **shared cost arrangements**.
4. Seek **innovative financing solutions** to partner with our customers to enable an inclusive zero-carbon future for all SMUD customers.
5. Attract **clean technology investors** to our region for developing and scaling solutions in clean energy and electrification.

Research

- Partnering & financing options.

Financial outlook will be refined as plan is adjusted.

March 31, 2021
# 2030 Zero Carbon Plan summary

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## Reliability studies
- McClellan
- Campbell
- Carson
- Procter & Gamble
- Cosumnes

## Proven clean tech
- 5MW
- 100MW
- 250MW
- 91MW
- 100 MW

## New tech & business models
- VPP Pilots
- V2G Pilots
- Research game changing tech: Storage, biofuels, sequestration

## Financial impact & options
- Partnerships, grants, joint ventures
- Identify internal savings
- Assess & mitigate financial risks
- Regulatory and legislative advocacy for zero carbon solutions

## Scale investments, grants, ventures in new tech & business models
- Solar: 500-750MW Batteries: 50-250MW
- 360-1,300 MW

---

March 31, 2021

Special Board of Directors Meeting
12-month action plan

**Promote**  
Marketing, communication & outreach

**Solicit**  
New proven clean technology projects

**Launch**  
Pilot programs

**Research**  
Grid-scale technologies

**Execute**  
Additional detailed reliability studies

**Identify**  
Opportunities for external funding, collaboration & internal savings

**Collaborate**  
With policy makers on the 2030 Zero Carbon Plan

**Find**  
Opportunities for workforce skills development & community involvement in 2030 Zero Carbon Plan
Public inputs on 2030 Zero Carbon Plan

- **March 26.** The 2030 draft Zero Carbon Plan is available at smud.org/zerocarbon, including draft technical report and executive summary. Written public input is welcome – submission via smud.org/zerocarbon. All comments will be published.

- **March 31.** Presentation of 2030 Zero Carbon Plan and process for discussion and public comment.

- **April 7.** Board Policy Committee meeting to discuss potential changes to SD-7 and SD-9. Opportunity for public input.

- **April 16.** Deadline for public comment on 2030 Zero Carbon Plan for inclusion in the staff summary at the Board meeting April 28.

- **April 28.** Special Board meeting for consideration of the Zero Carbon Plan, public inputs received and adoption of resolution endorsing the Plan.
Questions?
Attached please find a written statement submitted to the SMUD Board of Directors for the March 31, 2021 Special meeting on the 2030 Zero Carbon Plan.

Sincerely,

Frederick H. Morse  
President  
Morse Associates, Inc.

6904 Ridgewood Avenue  
Chevy Chase, MD 20815  

cell phone 202-276-0518
Statement to SMUD Board

I am Dr. Frederick Morse, President of Morse Associates, Inc. former Senior Executive in the Department of Energy and former Senior Advisor at Abengoa Solar where I played a lead role in the development of two 250 MW Concentrating Solar Power (CSP) plants, one operating since 2014 in California and the other operating in Arizona since 2013. I have interacted with SMUD since the 1980s and I commend Scott Martin and his teams for SMUD’s wide-ranging, flexible and visionary 2030 Zero Carbon Plan.

One oversight that I wish to call to the Board’s attention is the plan’s lack of consideration of CSP with its long duration thermal energy storage (TES). In Focus Area One, SMUD states that it plans to retire two of its natural gas plants and convert two others into peakers. The energy, capacity and other services provided by those plants will need to be replaced and a CSP plant with its long duration (e.g. 10-17 hours of full load storage) can help to meet those needs. A CSP plant can provide fully dispatchable synchronous generation and is an ideal complement to PV with batteries – the PV operates during the daytime while the CSP plant collects and stores the thermal energy from the sun and then operates from the evening peak (regardless of how late or long that peak is), all night and into the morning peak. Yet SMUD did not mention CSP in Focus Area Two – Proven Clean Technologies.

Aside from being included in a long list of innovative ideas (Appendix C), the total absence of any mention of CSP+TES as a proven and commercial clean technology surprised and concerned me. However, given that this plan is flexible and open to other technologies that are reliable and cost effective, I believe that SMUD should consider CSP+TES and when it does, it will find that CSP+TES could and should be included.

There are about 100 CSP plants operating commercially globally, with a total capacity of 6 GW. Most of the newer plants have molten salt thermal energy storage with a total capacity of 3.3 GW and storing 25 GWh of energy. The two largest fleets of CSP plants are in Spain (2.3 GW) and the US (1.6 GW) and public data show they are dependable – with less than 10% variation in annual output year after year. CSP plants are flexible in their design and in their operation. By changing the relative size of the solar field, the hours of thermal energy storage and the turbine capacity, a CSP plant could meet any demand profile, from peaking to baseload. For example, a CSP plant was designed to meet the Arizona summer afternoon/evening peak. This project was competitive with building a new natural gas peaker plant. And a plant in Spain, Gemasolar, has operated at its design output 24 hours a day for over 30 days, regardless of how cloudy any of those days were.

Because CSP+TES is the lowest cost carbon free option to operate when the sun is down, three hybrid with PV configurations are possible:
(a) The CSP+TES plant and the PV + BES plant are not co-located but the grid operator can operate the CSP plant to ramp up and down and operate when the PV plants do not.

(b) Co-locate a CSP+TES plant on the same site as a PV plant – the 950 MW DEWA plant in Dubai and the 210 MW Cerro Dominador plant in Chile are examples of this configuration – PV operates during the day and CSP during the night.

(c) Integrate the CSP+TES plant with the PV+BES plant for 24/7 operation and store excess PV output in the molten salt storage via a resistance heater. A plant of this design is being built in Midelt, Morocco.

The cost of CSP has dropped faster than wind and PV at the same point on their learning curves. The lowest PPA price is 7.3 c/kWh for a 950 MW hybrid plant – 250 MW PV for daytime operation and 700 MW CSP with 10-15 hours of thermal energy storage for nighttime operation. Prices are expected to drop by around 30% as more plants are built.

Why did SMUD not include CSP + TES in Focus Area Two in this Plan? I think the Board should ask the authors why and the Board should ask the authors, as part of the flexibility of the plan, to study, using the latest cost and performance information, if and how adding CSP+TES to SMUD’s system would add to system reliability and affordability.

A recent study that looked back on 18 years of actual weather data in 28 southwest U.S. locations concluded that a CSP plant with 12 hours TES could have met a specific 8-hour demand 365 days a year with a small amount of a non-solar resource, such as natural gas or biogas. “Small amount” was typically 2-5% what a natural gas plant would need to meet that annual demand. I believe this deserves careful consideration.

It may be difficult to site a CSP+TES plant in SMUD’s service area. Such plants need between 12-16 acres/MW depending on the solar radiation and the hours of full load storage. The output of such plants may have to be imported from sites along transmission lines that connect to SMUD’s lines. This requires further investigation.

In summary:

- CSP plants provide synchronous generation with a range of grid reliability services, are flexible in design and output to meet any demand profile and because they can separate energy collection from generation, they are fully dispatchable.

- CSP + TES plants are the least costly renewable choice for complementing PV all night long and they could operate 24 hours a day when needed.

- CSP + TES plants can be designed to meet multi-hour evening peaks year around with minimal non-solar resource.
• CSP + TES could also collect and store in the molten salt curtailed energy from PV and wind for generation when needed.

• With demonstrated dependability, CSP + TES plants could significantly support SMUD’s transition to zero carbon generation.
SMUD Board Members,

On behalf of SAR and our 7,000+ members regionally, we applaud SMUD for their efforts in developing this plan and we look forward to being a partner in bringing education to our membership and their clientele and practical solutions that work for customers.

Thank you,

Carter Nelson (She/Her)
Government Affairs Coordinator
Sacramento Association of REALTORS®
2003 Howe Avenue, Sacramento, CA 95825
Phone: (916) 437-1208
Email: cnelson@sacrealtor.org
Dear Board of Directors:

Thank-you for your groundbreaking work on the 2030 Zero Carbon Action Plan.

Under the 12 month action plan section, I would like to see an item prioritizing collaboration between SMUD, the City of Sacramento and the County of Sacramento. I believe a formalized partnership between the 3 organizations will dramatically benefit each in their mutual pursuit of Zero Carbon by 2030. Benefits could include common public education and messaging, leveraging scale for purchases, electrification ordinances and more.

SMUD is in a great position to initiate and lead this work. Can this be added to your plan and executed in the next 12 months?

Thank-you!

Doug MacPherson
2504 Capitol Ave, Sacramento, CA 95816
dwmacpherson2000@gmail.com
916-616-6073

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Greetings SMUD Directors:

Vote Solar would like to commend SMUD for the development and release of your Draft 2030 Zero Carbon Plan. We believe that SMUD’s commitment to robust public engagement and its recognition that the plan is a road map, with the flexibility needed for future adaption, are hallmarks of a successful kick-off. We wholeheartedly support the goal of completely eliminating the use of fossil fuels in electricity production by 2030. We acknowledge that the goal of reducing carbon emissions becomes more difficult as you near the 100% carbon-free goal.

We support SMUD’s commitment to make proven clean energy technologies the backbone of SMUD’s Zero Carbon Plan. Solar, wind and geothermal energy are proven technologies with complementary attributes. Battery energy storage can be the lubricant that makes them work together better and reduce the need for fossil fuels. We appreciate that SMUD is committing to significantly expand investments in these technologies.

However, we are concerned that SMUD is being too cautious in its commitment to near-term action. It appears that SMUD is planning on procuring only 5 MW of battery storage before 2026 while procuring only 250 MW of solar by 2024. We encourage SMUD to be more aggressive in exploring the market for these technologies, particularly for hybrid solar plus storage projects that can capture the federal investment tax credit and help lower the cost of implementing the plan for SMUD ratepayers. Vote Solar is concerned SMUD may not fully appreciate the synergies these composite technologies can provide in terms of flexibility in dispatch that SMUD will need as it decreases its reliance on fossil fuel technologies that have longer start-up times and minimum run times.

Vote Solar is also concerned by the degree that SMUD is planning to rely on “renewable natural gas” and other biofuels. The Plan states that SMUD’s initial studies indicate that about half of SMUD’s fuel needs can be met with renewable natural gas supplies that are already under contract. We are interested in learning more about this analysis both in terms of costs and environmental impacts. It appears that SMUD intends to continue the full operation of the Cosumnes combined cycle power plant well beyond 2030. We are interested in learning more about the fuel requirements at Cosumnes going forward both before and after 2030.
There are limitations to the potential development of “renewable natural gas” from landfills or dairies in California. Likewise, “renewable natural gas” is dependent on aging gas pipelines that need to be properly maintained to avoid leakage of methane. We caution SMUD from overcommitting to “renewable natural gas” at this time as a fuel for operating the Cosumnes power plant and the repurposed combustion turbines. We encourage SMUD to consider long duration storage such as flow batteries, thermal storage and liquid air energy storage. Likewise, SMUD should also investigate solar thermal technologies coupled with thermal storage.

Vote Solar is encouraged by SMUD’s interest in new business models that would focus on leveraging customer-owned distributed resources into virtual power plants (VPP) and vehicle-to-grid applications. We note that there is a very wide range in the magnitude of the potential contribution from customer-owned resources - from 360 to 1,300 megawatts of capacity. Vote Solar believes SMUD should tilt to the high end of that range as it launches VPP pilot programs. The key to the success of the VPP pilots will be SMUD’s commitment to working closely with its customers and business partners. Customers should be encouraged to bring a variety of devices to the shared grid edge that can contribute to meeting your goals.

SMUD is embarking on this bold initiative at a propitious time, as the federal government is considering a new infrastructure initiative. We are encouraged that SMUD can be a model for other parts of the country and show a cost-effective path to decarbonizing our economy more quickly than others may have expected.

Respectfully,

Ed Smeloff | Senior Director, Grid Integration
ed@votesolar.org | 707.677.2107

Vote Solar
Trinidad, CA
votesolar.org
To: Board of Directors

From: Jane Lamborn, resident of Wilton
    jllamborn@sbcglobal.net
    916-505-1356

Subject: Board Meeting 3/31/2020
          Agenda Item No. 2

I am writing to commend you for issuing the SMUD 2030 Zero Carbon Plan. This Plan clearly adopts and sets forth the goal of achieving zero carbon emissions by 2030. Achieving this goal is essential if we are to avert widespread harm caused by climate change, including harm to our natural habitat, air quality, water, agricultural operations, and our communities, particularly disabled and elderly populations.

The Plan commits to retiring the McClellan plant by 2024 and the Campbell plant by 2025. These two plants disproportionately affect disadvantaged communities and it should be the highest priority to close them. Thank you for prioritizing their retirement. I urge you to stay with this timeline and to not allow any delays in reaching this goal.

Sincerely,

Jane Lamborn, resident of Wilton
jllamborn@sbcglobal.net
916-505-1356
As a SMUD customer and advocate for the climate, I want to say how happy I am about your adoption of the Climate Emergency Declaration with a 2030 goal date. You are pioneers in the Utility Industry and setting an example of what needs to happen nationwide.

I want to be supportive of your plan, but have concerns that the gas plants need to be shut down as soon as possible. Turning most of them off by 2030 per your graph, is disturbing as those plants will continue to expel GHG for the better part of 10 years. I am not seeing provision for those residents who are most impacted by the pollution. I am also concerned about the reliance for nearly half of future fuel needs on "renewable natural gas", and would like to see more information about the cost, the complications and environmental impacts of this resource.

Clearly energy efficiency is key and rooftop solar is critical to your plan. I am very concerned that the independent study will justify reducing rooftop solar, when as a community, let alone globally, we need to be increasing use of this resource. Rooftop solar should be encouraged and utilized by both private customers as well as businesses and all other available rooftops. This energy source will allow us as a community to reach the zero carbon goals with the least environmental impact as well as lower costs especially for lower income residents. Your draft speaks to concerns re raising rates, which we frequently hear in board meetings. If you do not support rooftop solar, it is like shooting yourself in the foot. The NEM should not be gutted, as I fear it might. I witnessed the Board making decisions that cut out public comment re solar in the past and am concerned historically you are not being upfront with the public about your solar plans. I fear the Board will use this flawed independent study to justify sabotaging rooftop solar. As a utility SMUD is creative, and is a role model for this country and has the resources to come up with equitable solutions around solar and rates. I am willing to pay a bit more each month, so customers with lower incomes can get relief on their bills, especially in peak times. I want to make it clear as well, that I do not have rooftop solar on my home, as I cannot afford it. I hope to in the future.

Your 2030 Zero Carbon Plan should not be penalizing customers who are trying to help themselves and their environment by installing rooftop solar. It should take into account the cost to our environment, to our community residents, especially those who are more vulnerable income and health wise. SMUD needs to embrace the value of resilience and act as a responsible community entity. Time is running out and these current decisions are critical. We are all in the fight together to save our ailing planet so when we are all gone, our children and grandchildren can continue in a liveable environment. What does this SMUD Board want as it's legacy?

Thank you for your time and consideration.

Ann Amato, Carmichael resident
Dear SMUD Board Members,

These initial comments are offered by the Climate Emergency Mobilization Team of the Sacramento Climate Coalition on the publication of the 2030 Carbon Zero Plan. We will provide more detailed comments on the plan by April 16, 2021.

Comments:

We congratulate SMUD on your bold leadership. We believe your commitment to shut down two of the natural gas plants should be matched by a similar commitment to remove at least two more plants from service so as to eliminate the dependence on combustion technologies, which all have the downside of fuel sources leakage and emissions contributing to increased GHGs. Even with very large reductions, without elimination we approach thresholds in GHGs in the atmosphere which will trigger irreversible changes in the climate on human scale.

We applaud the increase in solar and battery technology as part of the solution, but believe the goals could be and need to be more aggressive.

We appreciate that more time has been given for public comment, but believe that 30 days should be a minimum expectation for public review and comment of any documents released.

We appreciate the inclusion of new business models that would focus on leveraging customer-owned distributed resources into virtual power plants (VPP) and vehicle-to-grid applications. The wide range of potential resources suggests a degree of uncertainty, and we encourage SMUD to invest heavily in researching and expanding the reliance on distributed energy resources as we believe it will support the greatest level of resilience in years to come. We believe that many of SMUD’s customers are eager to be a part of the solution and will embrace these and other shared resources approaches to generation, load management, and storage.

Both the City and the County have declared a climate emergency. With the many physical assets they each possess and their ability to reach SMUD’s customers, their residents, shared program development with each is a viable and necessary path forward.
Good Evening SMUD Board members

I read through the Zero Carbon Plan. And here is my input.

A promise to decarbonize by 2030— Good

NOT GOOD:
Many of us have been pushing homegrown community power models since the days of the first SMUD IRP and now this is what we get. Good lord, SMUD still repeating the 3x cost differential statistic, even after all that’s come out about the cost of long-distance power lines, and the implications once SMUD has to join a larger power distribution network to ensure the state hits 100% by 2045. Unbelievable.

A plan to get a good percentage of the solar electric power from Southern California or in the jargon of the plan, “solar power from other balancing authority areas” in “utility-scale” projects. What this means to me is SMUD is going to forego putting panels on our parking lots, highways, and commercial buildings so we can buy power from the lower Kern and SoCal desert where major natural areas will convert to solar electric farms.
For those that remember, SMUD helped destroy the Klamath River to develop hydro (Lewiston) and now we head to the “other balancing authority areas” despite our history of destroying natural areas.

Wind will come from Wyoming and Colorado. This means more transmission lines and externalizing our delivery costs onto natural areas.

Pump storage on the American is deemed too expensive(p 84). Once again the costs of buying power from somewhere else is being announced as cheaper when the better option of paying for the actual environmental cost of pump storage powered by our own local solar surplus is “infeasible” or to be studied.

Virtual Power Plants (VPP)- The report indicates they are to be managed as “utility” resources. Does this mean they will have to sell power at .03 KW and if the price for a VPP is set to “utility standards” which are in effect subsidized prices not reflecting the true environmental costs then we get few if any serious VPP projects?

I am no expert but this report seems like a rehash of the last IRP improved by a moved-up timeline. If every new clean power supply is going to be measured against the reliably of liquid fuels no solar or wind or battery will measure up. We need to
redesign the power system knowing that no power supply will meet the reliability of liquid fuel burned in a thermal electric generator. The era of liquid fuels is ending and the engineers need to move on.

Sincerely
Lee Miller
Ward 3
Sacramento 95829
### BOARD AGENDA ITEM

#### STAFFING SUMMARY SHEET

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</table>

**Requested Action:** Discuss proposed revisions to **Strategic Direction SD-6, Safety**.

**Summary:** Discuss final proposed changes to the language to Strategic Direction SD-6, Safety. The last update of SD-6 was in 2014, and final recommended changes are included from the March 10, 2021, Policy Committee meeting where the Board provided staff with recommended changes.

**Board Policy:** SD-6 is Core Value of Safety.

**Benefits:** Provide the Board of Directors with an opportunity to review and update the SD, and make any policy revisions, as necessary.

**Cost/Budgeted:** None

**Alternatives:** Keep existing SD-6 language with no changes.

**Affected Parties:** Board of Directors, Executive Staff

**Coordination:** Organization-wide

**Presenter:** Patrick Durham, Director of Environmental & Real Estate Services

**Additional Links:**

**SUBJECT**

Discuss Proposed Revisions to Strategic Direction SD-6, Safety

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

6

**ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.**
SMUD BOARD POLICY

Category: **Strategic Direction**  
Title: **Safety Leadership**  
Policy Number: **SD-6**  

<table>
<thead>
<tr>
<th>Date of Adoption:</th>
<th>August 21, 2003</th>
<th>Resolution No.</th>
<th>03-08-12</th>
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<td>Revision Date:</td>
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<td>Resolution No.</td>
<td>03-10-14</td>
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<td>February 3, 2005</td>
<td>Resolution No.</td>
<td>05-02-06</td>
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<td>Revision Date:</td>
<td>November 15, 2007</td>
<td>Resolution No.</td>
<td>07-11-12</td>
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<td>Revision Date:</td>
<td>December 20, 2012</td>
<td>Resolution No.</td>
<td>12-12-11</td>
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<td>August 21, 2014</td>
<td>Resolution No.</td>
<td>14-08-05</td>
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<tr>
<td>Revision Date:</td>
<td>April 15, 2021</td>
<td>Resolution No.</td>
<td>21-04-XX</td>
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</table>

Creating a safe environment for employees and the public is a core value of SMUD. Through **best practice methods and continuous improvement**, SMUD will be recognized as a leader in employee safety while also assuring the safety of the public related to SMUD operations and facilities. SMUD commits to **This requires a proactive approach, including the active involvement of SMUD leadership, employees, contractors, and our the community, as well as** This includes a comprehensive **approach to monitoring of** organizational and public safety performance.

Therefore, SMUD will continue to improve safety results to:

**Workplace Safety**

a) Reduce SMUD’s injury severity **incidents to 13 or less than by 2025 rate to 1.4 by 2020**, as measured by OSHA’s Days Away Restricted Time (DART), a rate that demonstrates **top quartile strong** safety performance **for similar size utilities using the Bureau of Labor Statistics (BLS) work-related safety data**.

b) Provide timely, quality health care for injured employees that aids their recovery while maintaining positive financial performance of the workers' compensation program.
Contractor Safety

a) Support contractors to reduce and eliminate potential hazards for Serious Injuries and/or Fatality (SIF) when conducting high risk work.

Public Safety

a) Track and report injuries to the public directly related to SMUD operations or facilities.

b) Implement measures to protect the public from injuries related to SMUD operations or facilities.

Monitoring Method: GM Report
Frequency: Semi-Annual
Creating a safe environment for employees and the public is a core value of SMUD.

Through best practice methods and continuous improvement, SMUD will be recognized as a leader in employee safety while also assuring the safety of the public related to SMUD operations and facilities. SMUD commits to a proactive approach, including the active involvement of SMUD leadership, employees, contractors, and the community, as well as comprehensive monitoring of organizational and public safety performance.

Therefore, SMUD will continue to improve safety results to:

Workplace Safety

a) Reduce SMUD’s injury severity incidents to 13 or less than by 2025, as measured by OSHA’s Days Away Restricted Time (DART), a rate that demonstrates top quartile safety performance for similar size utilities using the Bureau of Labor Statistics (BLS) work-related safety data.

b) Provide timely, quality health care for injured employees that aids their recovery while maintaining positive financial performance of the workers’ compensation program.
Contractor Safety

a) Support contractors to reduce and eliminate potential hazards for Serious Injuries and/or Fatality (SIF) when conducting high risk work.

Public Safety

a) Track and report injuries to the public related to SMUD operations or facilities.

b) Implement measures to protect the public from injuries related to SMUD operations or facilities.

Monitoring Method: GM Report
Frequency: Semi-Annual
RESOLUTION NO. ______________

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

This Board approves the revisions to Strategic Direction SD-6, Safety,

substantially in the form as set forth in Attachment ___.

DRAFT
TO TO

1. Alan Sparks 6. Gary King
2. Robert Adams 7. Jennifer Davidson
5. Frankie McDermott 10. CEO & General Manager

Consent Calendar  X  Yes  No (If no, schedule a dry run presentation.)  Budgeted  X  Yes  No (If no, explain in Cost/Budgeted section.)
FROM (IPR)  Doug Moore  DEPARTMENT  Supply Chain Services  MAIL STOP  EA404  EXT.  7069  DATE SENT  04/02/2021

NARRATIVE:

Requested Action: Authorize the Chief Executive Officer and General Manager to award a contract to Granite Construction Company to provide Construction Services for the Union Valley Bike Trail Extension Project in the Crystal Basin region of the Upper American River Project (UARP) for a total contract amount not-to-exceed $20,300,300 and for a contract term from May 1, 2021, to December 31, 2023.

Summary: RFP Doc. 2763582351 was issued on December 18, 2020, to solicit qualified firms to extend the Union Valley Bike Trail as required by United States Forest Service (USFS) 4(e) Condition 45 of the License for the UARP. The scope of work includes a paved bike trail, a paved parking area, picnic area, boardwalk and bridge structures, etc. The design/environmental/permitting for this project has received USFS approval. Construction is planned to begin as soon as snowmelt allows in 2021 and is targeted for completion before inclement weather begins toward the end of 2021.

Board Policy: BL-8; Delegation to the CEO and GM with respect to Procurement; Procurement principles followed in this award include but are not limited to: a) Competition, d) Inclusiveness, e) Economic Development, f) Environmental Procurement, and g) Responsible Bidder(s).

Recommendation: Award to Highest Evaluated Responsive Proposer

Award to:

Granite Construction Company
1900 Glendale Ave.
Sparks, NV 89431

Participants Invited - Ariba: 9

Bids/Proposals Received: 5

<table>
<thead>
<tr>
<th>Responsive Proposals Received</th>
<th>SEED Points</th>
<th>Technical Points</th>
<th>Price Points</th>
<th>Total Score</th>
<th>Rank</th>
<th>Proposal Amount</th>
<th>SEED Credit</th>
<th>Evaluated Proposal Amount</th>
<th>Proposed Award Amount</th>
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<td>10.00</td>
<td>47.42</td>
<td>38.28</td>
<td>95.70</td>
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<td>$20,300,300</td>
<td>$250,000</td>
<td>$20,050,300</td>
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<td>40.00</td>
<td>94.77</td>
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<td>$19,189,439</td>
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<td>Clark Bros., Inc.</td>
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<td>39.65</td>
<td>37.00</td>
<td>86.65</td>
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<td>$20,994,475</td>
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<td>$20,744,475</td>
<td>$20,994,475</td>
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<td>Burdick Excavating, Inc.</td>
<td>10.00</td>
<td>28.15</td>
<td>39.31</td>
<td>77.46</td>
<td>4</td>
<td>$19,776,312</td>
<td>$250,000</td>
<td>$19,526,312</td>
<td>$19,776,312</td>
</tr>
</tbody>
</table>
SEED Program:

The highest evaluated responsive proposer, Granite Construction, Inc., is self-performing 80% of this work. Through outreach efforts, Granite was able to subcontract with SEED verified subcontractors/vendors for 20% of their contract.

Benefits: Completion of a major project that is a requirement/condition for compliance with the operating License for the UARP.

Cost/Budgeted: $20,300,300 Budgeted for 2021/2022 by Power Generation, Cost Center 463

Alternatives: None. Project is UARP License Compliance.


Presenter: Ross Gould, Director of Power Generation

Additional Links:

SUBJECT
Award Contract to Granite Construction Company
to complete the Union Valley Bike Trail Extension Project

ITEM NO. (FOR LEGAL USE ONLY) 7

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
RESOLUTION NO. ____________

WHEREAS, the Federal Energy Regulatory Commission (FERC) license for the Upper American River Project (UARP) requires SMUD to upgrade essentially all existing recreation facilities and construct new facilities in the Crystal Basin Recreation Area; and

WHEREAS, on December 18, 2020, SMUD issued Request for Proposal (RFP) No. Doc2701606177 to solicit qualified firms to extend the Union Valley Bike Trail as required by the FERC license; and

WHEREAS, five proposals were received and evaluated; NOW,

THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. As a result of such evaluation, Granite Construction Company is hereby determined and declared to be the highest evaluated responsive proposer to provide construction services for the Union Valley Bike Trail Extension Project.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of SMUD, to award a contract to Granite Construction Company to provide construction services for the Union Valley Bike Trail Extension Project in the Crystal Basin region of the Upper American River Project (UARP) for a total contract amount not-to-exceed $20,300,300, and for a contract term from May 1, 2021, to December 31, 2023.
Section 3. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the contract that, in his prudent judgment: (a) further the primary purpose of the contract; (b) are intended to provide a net benefit to SMUD; and (c) do not exceed the authorized contract amounts and applicable contingencies.
**REQUESTED ACTION:**

Authorize the Chief Executive Officer and General Manager to award contracts to Sierra National Construction, Inc. (SNC), Arrow Construction (Arrow), and Mountain G Enterprises (MGE) for Civil Construction Services for a contract term of three years from April 19, 2021, to April 18, 2024, for a total aggregate contract amount not-to-exceed $35,000,000.

**Summary:**
Request for Proposal (RFP) No. Doc2718362413 was issued in December 2020 to solicit qualified firms to provide civil construction services that include constructing cast in place reinforced concrete structures including drilled piers, cast in place concrete foundations, constructing cast in place concrete retaining walls and cable trenches; setting reinforced precast concrete structures and service boxes, installing conduit duct banks, performing structural repairs on concrete structures, manholes and boxes; installing or modify electrical grounding systems, fencing, manhole access grates which includes field welding, furnishing and placing aggregate base and crushed rock, grading and paving, constructing electric vehicle charging stations, or any other construction-related needs. A pre-proposal conference was held on January 12, 2021, of which nine vendors attended. On February 2, 2021, eight proposals were received and evaluated in accordance with the advertised criteria. Of the eight proposals received, six were responsive.

The final pricing from SNC, Arrow, and MGE was highly competitive; and combined with their technical score, informed the decision to recommend contract awards to the three highest rated proposers. Awarding three (zero-dollar) contracts with an aggregate amount of all tasks not-to-exceed $35,000,000 for three years gives the business unit flexibility and mitigates the risk of work disruption. The result of the evaluation and award recommendations are shown below.

**RECOMMENDATION:**
Award to the Highest Evaluated Responsive Proposers.

<table>
<thead>
<tr>
<th>Award to:</th>
<th>Arrow Construction</th>
<th>Sierra National Construction, Inc.</th>
<th>Mountain G Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1850 Diesel Drive</td>
<td>5433 El Camino Ave., Ste 4</td>
<td>1180 Iron Point Rd., Suite 320</td>
</tr>
<tr>
<td></td>
<td>Sacramento, CA 95838</td>
<td>Carmichael, CA 95608</td>
<td>Folsom, CA 95630</td>
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## Proposers

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<tr>
<th>Proposers Notified by Procurement:</th>
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<tr>
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<td>17</td>
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<td>Pre-Proposal Conference Attendance:</td>
<td>9</td>
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## Responsive Proposals Received

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<th>P/F</th>
<th>SEED Points</th>
<th>Technical Points</th>
<th>Price Points</th>
<th>Total Score</th>
<th>Rank</th>
<th>Proposal Amount</th>
<th>SEED Credit</th>
<th>Evaluated Proposal Amount</th>
<th>Proposed Award Amount</th>
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<tr>
<td>Sierra National Construction, Inc.</td>
<td>P</td>
<td>10</td>
<td>31.33</td>
<td>53.35</td>
<td>94.68</td>
<td>1</td>
<td>$4,824,975</td>
<td>$234,350</td>
<td>$4,590,625</td>
<td>The aggregate amount of all task authorizations not-to-exceed $35,000,000</td>
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<tr>
<td>Arrow Construction</td>
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<td>93.71</td>
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<td>$4,873,015</td>
<td>$234,350</td>
<td>$4,638,665</td>
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<td>Mountain G. Enterprises</td>
<td>P</td>
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<td>55.00</td>
<td>91.33</td>
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<td>$4,687,000</td>
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<td>Pacific Gold Marketing</td>
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## Non-Responsive Proposals Received

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<td>Anvil Builders</td>
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<tr>
<td>Teichert Energy &amp; Utilities Group, Inc.</td>
<td>$5,300,567</td>
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## Comments

The RFP included a provision of the Proposer’s to achieve a minimum of 25 points out of 35 technical points available in Evaluation Criteria Items 3, 4, and 5. Anvil Builders was deemed non-responsive as they achieved a total technical score of 22.33. Teichert Energy & Utilities Group, Inc. was deemed non-responsive as they achieved a total technical score of 21.17.

## Supplier Diversity Program:

SNC is a SEED verified vendor and was the highest ranked proposer. SNC proposed to self-perform 98% of the work and subcontract 2% to a SEED verified vendor. Arrow is a SEED verified vendor and was the second highest ranked proposer. Arrow proposed to self-perform 92% of the work and subcontract 8% to SEED verified vendors. MGE was the third highest ranked proposer and proposed to self-perform 79.5% of the work and subcontract 20.2% to SEED verified vendors and 0.3% to non-SEED vendors.

## Benefits:

Award will provide SMUD with three qualified contractors to execute civil construction.

## Cost/Budgeted:

$35,000,000; Budgeted for 2021 through 2024 by Grid Assets

## Alternatives:

Resolicit proposals and award funded contracts. This would not be in SMUD’s best interest because it does not present the competitive tension at a task level that is key to continued cost savings and contractor efficiencies to complete the work.

## Affected Parties:

Grid Assets, Supply Chain Services, and Contractor

## Coordination:

Grid Assets and Supply Chain Services

## Presenter:

Mike Deis, Director of Substations, Telecom and Metering Assets

## Additional Links:

SUBJECT: Award Civil Annual Construction Contracts

ITEM NO. (FOR LEGAL USE ONLY) 8

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
RESOLUTION NO. ______________

WHEREAS, in December 2020, SMUD issued Request for Proposal No. Doc2718362413 (RFP) to solicit qualified firms to provide civil construction services; and

WHEREAS, eight (8) proposals received in response to the RFP were evaluated; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. As a result of such examination, Sierra National Construction, Inc., Arrow Construction and Mountain G Enterprises are hereby determined and declared to be the three highest evaluated responsive proposers to provide civil construction services.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of SMUD, to award contracts to Sierra National Construction, Inc., Arrow Construction and Mountain G Enterprises to provide civil construction services for a contract term of three years from April 19, 2021, to April 18, 2024, for a total aggregate contract amount not-to-exceed $35,000,000.

Section 3. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the contracts that, in his prudent judgment: (a) further the primary purpose of the
contracts; (b) are intended to provide a net benefit to SMUD; and (c) do not exceed the authorized contract amounts and applicable contingencies.
TO TO

1. Alan Sparks
2. Robert Adams
3. Casey Fallon
4. Patrick Garvey
5. Mike Deis
6. Frankie McDermott
7. Gary King
8. Jennifer Davidson
9. Legal
10. CEO & General Manager

Consent Calendar | X | Yes | No | If no, schedule a dry run presentation. | Budgeted | X | Yes | No | If no, explain in Cost/Budgeted section. |
---|---|---|---|---|---|---|---|---|---|---|
FROM (IPR) | Jesse Mays | DEPARTMENT | Procurement | MAIL STOP | EA404 | EXT. | 5744 | DATE SENT | 3/26/21 |

NARRATIVE:

Requested Action: Authorize the Chief Executive Officer and General Manager to award contracts to Arrow Construction (Arrow) and Teichert Energy & Utilities Group, Inc. (Teichert) for Urban Civil Construction Services in Downtown Sacramento for a contract term of three years from April 19, 2021, to April 18, 2024, for a total aggregate contract amount not-to-exceed $30,000,000.

Summary: Request for Proposals (RFP) No. WS2590304622 was issued in December 2020 to solicit qualified firms to provide construction services in Downtown Sacramento in the road right-of-way in high pedestrian and vehicular traffic to repair or modify existing high voltage electrical facilities or build new high voltage electrical structures or facilities in Downtown Sacramento. A pre-proposal conference was held on January 12, 2021 of which eight vendors attended. On February 2, 2021, four proposals were received and evaluated in accordance with the advertised criteria. Of the four proposals received, two were responsive. SMUD negotiated pricing with both responsive Proposers which resulted in a price reduction of 0.3% from Arrow and 5.7% from Teichert. The final pricing from Arrow and Teichert was highly competitive and determined to be fair and reasonable. Awarding two (zero-dollar) contracts with an aggregate amount of all tasks not-to-exceed $30,000,000 for three years gives the business unit flexibility and mitigates the risk of work disruption. The result of the evaluation and award recommendations are shown below.

Board Policy: BL-8, Delegation to the CEO and GM with Respect to Procurement; SD-4, Reliability; SD-6, Safety; SD-13, Economic Development

Recommendation: Award to the Highest Evaluated Responsive Proposers.

Award to:

<table>
<thead>
<tr>
<th>Arrow Construction</th>
<th>Teichert Energy &amp; Utilities Group, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850 Diesel Drive</td>
<td>3500 American River Drive</td>
</tr>
<tr>
<td>Sacramento, CA 95838</td>
<td>Sacramento, CA 95864</td>
</tr>
</tbody>
</table>

Proposers Notified by Procurement: 44
Proposers Downloaded: 15
Pre-Proposal Conference Attendance: 8
Proposals Received: 4
Responsive Proposals Received

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<th>SEED Credit</th>
<th>Evaluated Proposal Amount</th>
<th>Proposed Award Amount</th>
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</thead>
<tbody>
<tr>
<td>Arrow Construction</td>
<td>P</td>
<td>10</td>
<td>28.17</td>
<td>55</td>
<td>93.17</td>
<td>1</td>
<td>$14,967,900</td>
<td>$250,000</td>
<td>$14,717,900</td>
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<td>Teichert Energy &amp; Utilities Group, Inc.</td>
<td>P</td>
<td>10</td>
<td>25.50</td>
<td>52.43</td>
<td>87.93</td>
<td>2</td>
<td>$15,689,542</td>
<td>$250,000</td>
<td>$15,439,542</td>
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Non-Responsive Proposals Received

<table>
<thead>
<tr>
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<th>Proposal Amount</th>
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<tr>
<td>Clark Bros Inc.</td>
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<tr>
<td>Moreno Trenching, LTD</td>
<td>$18,297,350</td>
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Comments: The RFP included a provision of the Proposer’s to achieve a minimum of 24.5 points out of 35 technical points available in Evaluation Criteria Items 3, 4, 5, and 6. Clark Bros Inc. was deemed non-responsive as they achieved a total technical score of 18.5. Moreno Trenching, LTD was deemed non-responsive as they achieved a total technical score of 20.93.

Supplier Diversity Program:
Arrow is a SEED verified vendor and was the highest ranked proposer. Arrow proposed to self-perform 87.5% of the work and subcontract 8% to SEED verified vendors and 4.5% to non-SEED vendors. Teichert was the second highest ranked proposer and proposed to self-perform 70.5% of the work and subcontract 29.5% to SEED verified vendors.

Benefits: Award will provide SMUD with two qualified contractors to execute civil construction in Downtown Sacramento.

Cost/Budgeted: $30,000,000; Budgeted for 2021 through 2024 by Grid Assets

Alternatives: Re-solicit proposals and award funded (costs-not-to-exceed) contracts. This would not be in SMUD’s best interest because it does not present the competitive tension at a task level that is key to continued cost savings and contractor efficiencies to complete the work. Soliciting new proposals will also delay SMUD projects to deliver power to our customers.

Affected Parties: Grid Assets, Supply Chain Services, and Contractor

Coordination: Grid Assets and Supply Chain Services.

Presenter: Mike Deis, Director of Substations, Telecom and Metering Assets

Additional Links:
RESOLUTION NO. ______________

WHEREAS, in December 2020, SMUD issued Request for Proposal No. WS2590304622 (RFP) to solicit qualified firms to provide urban civil construction services in Downtown Sacramento; and

WHEREAS, four (4) proposals received in response to the RFP were evaluated; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. As a result of such examination, Arrow Construction and Teichert Energy & Utilities Group, Inc. are hereby determined and declared to be the two highest evaluated responsive proposers to provide urban civil construction services in Downtown Sacramento.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of SMUD, to award contracts to Arrow Construction and Teichert Energy & Utilities Group, Inc. to provide urban civil construction services in Downtown Sacramento for a contract term of three years from April 19, 2021, to April 18, 2024, for a total aggregate contract amount not-to-exceed $30,000,000.

Section 3. The Chief Executive Officer and General Manager, or his designee, is authorized to make future changes to the terms and conditions of the contracts that, in his prudent judgment: (a) further the primary purpose of the
contracts; (b) are intended to provide a net benefit to SMUD; and (c) do not exceed the authorized contract amounts and applicable contingencies.
Requested Action: Approve proposed revisions to Strategic Direction SD-1A, Purpose Statement.

Summary: The Board conducted a holistic review of Strategic Direction SD-1A, Purpose Statement (SD-1A) facilitated by Board consultant, Eric Douglas. Changes were recommended to the existing policy and presented at the April 7, 2021, Policy Committee. The Board requested that the changes be brought back for additional discussion at the April 15, 2021, Board meeting. A redline copy of the updated proposed revisions to SD-1A is attached, as well as a “clean” copy.

Board Policy: GP-1, Purpose of Board – Subsection a) Identify and define the purpose, values and vision of SMUD…and communicate them in the form of policy.

Benefits: Enables Board Members to review the policy with the opportunity to make corrections, additions, or changes if necessary.

Cost/Budgeted: N/A

Alternatives: Maintain the existing policy.

Affected Parties: Board of Directors, SMUD, Community

Coordination: Board Office, Executive Office, Legal

Presenter: Eric Douglas, Board Consultant

Additional Links:
SMUD is community-owned. Our purpose is to enhance the quality of life for our customers and community through creative energy solutions by providing reliable and affordable electricity, and leading the transition to a clean energy future.
### SMUD BOARD POLICY

<table>
<thead>
<tr>
<th>Category:</th>
<th>Strategic Direction</th>
<th>Title:</th>
<th>Purpose Statement</th>
</tr>
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<tbody>
<tr>
<td>Policy Number:</td>
<td><strong>SD-1A</strong></td>
<td>Resolution No.</td>
<td><strong>03-05-09</strong></td>
</tr>
<tr>
<td>Date of Adoption:</td>
<td><strong>May 1, 2003</strong></td>
<td>Resolution No.</td>
<td><strong>03-10-14</strong></td>
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<td>Revision Date:</td>
<td><strong>October 16, 2003</strong></td>
<td>Resolution No.</td>
<td><strong>07-11-11</strong></td>
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<tr>
<td>Revision Date:</td>
<td><strong>November 15, 2007</strong></td>
<td>Resolution No.</td>
<td><strong>08-06-11</strong></td>
</tr>
<tr>
<td>Revision Date:</td>
<td><strong>June 19, 2008</strong></td>
<td>Resolution No.</td>
<td><strong>15-08-10</strong></td>
</tr>
<tr>
<td>Revision Date:</td>
<td><strong>August 20, 2015</strong></td>
<td>Resolution No.</td>
<td><strong>21-04-XX</strong></td>
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</tbody>
</table>

SMUD’s purpose is to enhance the quality of life for our customers and community by providing reliable and affordable electricity, and leading the transition to a clean energy future.

**Monitoring Method:** Board Report  
**Frequency:** Annual
RESOLUTION NO. ______________

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

This Board approves the revisions to Strategic Direction SD-1A,

Purpose Statement, substantially in the form as set forth in Attachment ____.
Requested Action: Approve proposed revisions to Strategic Direction SD-1B, Vision Statement.

Summary: The Board conducted a holistic review of Strategic Direction SD-1B, Vision Statement (SD-1B) facilitated by Board consultant, Eric Douglas. Changes were recommended to the existing policy and presented at the April 7, 2021, Policy Committee. The Board requested that the changes be brought back for additional discussion at the April 15, 2021, Board meeting. A redline copy of the updated proposed revisions to SD-1B is attached, as well as a “clean” copy.

Board Policy: GP-1, Purpose of Board – Subsection a) Identify and define the purpose, values and vision of SMUD…and communicate them in the form of policy.

Benefits: Enables Board Members to review the policy with the opportunity to make corrections, additions, or changes if necessary.

Cost/Budgeted: N/A

Alternatives: Maintain the existing policy.

Affected Parties: Board of Directors, SMUD, Community

Coordination: Board Office, Executive Office, Legal

Presenter: Eric Douglas, Board Consultant

Additional Links:

SUBJECT
Proposed Revisions to SD-1B, Vision Statement

ITEM NO. (FOR LEGAL USE ONLY) 11

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
SMUD BOARD POLICY

<table>
<thead>
<tr>
<th>Category: Strategic Direction</th>
<th>Title: Vision Statement</th>
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<tr>
<td>Policy Number: SD-1B</td>
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<tr>
<td>Date of Adoption: December 2, 2004</td>
<td>Resolution No. 04-12-12</td>
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<td>Revision: April 19, 2007</td>
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<td>Revision: November 15, 2007</td>
<td>Resolution No. 07-11-10</td>
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<tr>
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<td>Resolution No. 08-10-09</td>
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<tr>
<td>Revision: November 7, 2013</td>
<td>Resolution No. 13-11-02</td>
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<td>Revision: August 20, 2015</td>
<td>Resolution No. 15-08-11</td>
</tr>
<tr>
<td>Revision: April 15, 2021</td>
<td>Resolution No. 21-04-XX</td>
</tr>
</tbody>
</table>

SMUD’s vision is to be the a trusted and powerful partner in achieving an inclusive, zero carbon economy. SMUD will leverage its relationships to accelerate innovation, with our customers and community, providing innovative solutions to ensure energy affordability and reliability, improve-protect the environment, reduce our region’s carbon footprint, eliminate greenhouse gas emissions, catalyze economic and workforce development, promote environmental justice, and enhance the community vitality of our communityfor all.

Monitoring Method: Board Report
Frequency: Annual
SMUD BOARD POLICY

<table>
<thead>
<tr>
<th>Category: Strategic Direction</th>
<th>Title: Vision Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Revision: August 20, 2015</td>
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</tr>
</tbody>
</table>

SMUD’s vision is to be a trusted and powerful partner in achieving an inclusive, zero carbon economy. SMUD will leverage its relationships to accelerate innovation, ensure energy affordability and reliability, protect the environment, eliminate greenhouse gas emissions, catalyze economic and workforce development, promote environmental justice, and enhance community vitality for all.

Monitoring Method: Board Report
Frequency: Annual
RESOLUTION NO. ______________

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

This Board approves the revisions to Strategic Direction SD-1B, Vision Statement, substantially in the form as set forth in Attachment ____.
Requested Action: Approve proposed revisions to **Strategic Direction SD-7, Environmental Leadership**.

Summary: The Board conducted a holistic review of Strategic Direction SD-7, Environmental Leadership (SD-7) facilitated by Board consultant, Eric Douglas. Changes were recommended to the existing policy and presented at the April 7, 2021, Policy Committee. The Board requested that the changes be brought back for additional discussion at the April 15, 2021, Board meeting. A redline copy of the updated proposed revisions to SD-7 is attached, as well as a “clean” copy.

**Board Policy:** GP-1, Purpose of Board – Subsection a) Identify and define the purpose, values and vision of SMUD…and communicate them in the form of policy.

**Benefits:** Enables Board Members to review the policy with the opportunity to make corrections, additions, or changes if necessary.

**Cost/Budgeted:** N/A

**Alternatives:** Maintain the existing policy.

**Affected Parties:** Board of Directors, SMUD, Community

**Coordination:** Board Office, Executive Office, Legal

**Presenter:** Eric Douglas, Board Consultant
SMUD BOARD POLICY

Environmental leadership is a core value of SMUD. The Board is committed to environmental leadership through community engagement, continuous improvement in pollution prevention, carbon reduction, energy efficiency, and conservation. In achieving this directive, SMUD will:

Therefore:

a) SMUD will conduct its business affairs and operations in a sustainable manner by continuously improving pollution prevention, that reduces adverse minimizing environmental impacts, conserving resources, and promoting equity within SMUD’s diverse communities. Reduces pollution, and enhances resource conservation and stewardship.

b) SMUD will provide leadership and innovation to improve air quality and reduce greenhouse gas emissions in the reduction of the region’s total emissions of greenhouse gases through proactive programs in all SMUD activities and development and support of national, State, and regional climate change policies and initiatives.

c) SMUD will promote the efficient use of energy by its customers.

d) Advance the electrification of vehicles, buildings and equipment.

d) Attract and build partnerships with customers, communities, policy makers, the private sector and other stakeholders. SMUD will proactively engage its customer-owners and other stakeholders in meeting this directive.

Monitoring Method: GM Report
Frequency: Annual
<table>
<thead>
<tr>
<th>Category: Strategic Direction</th>
<th>Title: Environmental Leadership</th>
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<tr>
<td>Date of Adoption: August 21, 2003</td>
<td>Resolution No. 03-08-13</td>
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<td>Revision Date: October 16, 2003</td>
<td>Resolution No. 03-10-14</td>
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<td>Revision Date: July 21, 2005</td>
<td>Resolution No. 05-07-10</td>
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<td>Revision Date: December 18, 2008</td>
<td>Resolution No. 08-12-14</td>
</tr>
<tr>
<td>Revision Date: April 15, 2021</td>
<td>Resolution No. 21-04-XX</td>
</tr>
</tbody>
</table>

Environmental leadership is a core value of SMUD. In achieving this directive, SMUD will:

a) Conduct its business affairs and operations in a sustainable manner by continuously improving pollution prevention, minimizing environmental impacts, conserving resources, and promoting equity within SMUD’s diverse communities.

b) Provide leadership and innovation to improve air quality and reduce greenhouse gas emissions.

c) Promote the efficient use of energy by our customers.

d) Advance the electrification of vehicles, buildings and equipment.

e) Attract and build partnerships with customers, communities, policy makers, the private sector and other stakeholders.

Monitoring Method: GM Report
Frequency: Annual
RESOLUTION NO. ______________

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

This Board approves the revisions to Strategic Direction SD-7,

Environmental Leadership, substantially in the form as set forth in Attachment ____.
NARRATIVE:

Requested Action: Approve proposed revisions to Strategic Direction SD-9, Resource Planning.

Summary: The Board conducted a holistic review of Strategic Direction SD-9, Resource Planning (SD-9) facilitated by Board consultant, Eric Douglas. Changes were recommended to the existing policy and presented at the April 7, 2021, Policy Committee. The Board requested that the changes be brought back for additional discussion at the April 15, 2021, Board meeting. A redline copy of the updated proposed revisions to SD-9 is attached, as well as a “clean” copy.

Board Policy: GP-1, Purpose of Board – Subsection a) Identify and define the purpose, values and vision of SMUD…and communicate them in the form of policy.

Benefits: Enables Board Members to review the policy with the opportunity to make corrections, additions, or changes if necessary.

Cost/Budgeted: N/A

Alternatives: Maintain the existing policy.

Affected Parties: Board of Directors, SMUD, Community

Coordination: Board Office, Executive Office, Legal

Presenter: Eric Douglas, Board Consultant

Additional Links:
It is a core value of SMUD to provide its customers and community with a sustainable power supply through the use of using an integrated resource planning process.

A sustainable power supply is defined as one that reduces SMUD's net long-term greenhouse gas (GHG) emissions to serve retail customer load to Net-Zero by 2030. Net-Zero GHG emissions is achieved through investments in vehicle and building electrification, energy efficiency, clean distributed resources, renewables portfolio standard (RPS) eligible renewables, energy storage, large hydroelectric generation, clean and biogas emissions free fuels, and new technologies and business.
models. Additionally, SMUD will continue pursuing GHG savings through vehicle, building and equipment electrification.

SMUD shall assure reliability of the system, minimize environmental impacts on land, habitat, water and air quality, and maintain a competitive position relative to other California electricity providers.

To guide SMUD in its resource evaluation and investment, the Board sets the following interim energy supply goal:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Greenhouse Gas Emissions (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>2,318,000</td>
</tr>
<tr>
<td>2030 - beyond</td>
<td>1,350,000</td>
</tr>
<tr>
<td>2040</td>
<td>Net Zero</td>
</tr>
<tr>
<td>2050</td>
<td>Net Zero</td>
</tr>
</tbody>
</table>

In keeping with this policy, SMUD shall also achieve the following:

a) Pursue energy efficiency and electrification to reduce carbon emissions by 365,000 metric tons from buildings and 1,000,000 metric tons from transportation in 2030 (the equivalent of 112,000 single family homes and 288,000 passenger vehicles electrified) Achieve overall energy efficiency for our customers to maximize carbon reduction consistent with our Net Zero carbon target.

b) Provide dependable renewable resources to meet or exceed the state’s mandate of 33% of SMUD’s retail sales by 2020, 44% by 2024, 52% by 2027, and 60% of its retail sales by 2030 and thereafter, excluding additional renewable energy acquired for certain customer programs.

c) In meeting GHG reduction goals, SMUD shall: emphasize local and regional environmental benefits.

1. Emphasize local and regional benefits.
2. Improve equity for under-served communities.

d) SMUD will continue exploring additional opportunities to accelerate and reduce carbon in our region beyond the GHG goals in this policy.

d) Explore, develop, and demonstrate emerging GHG-free technologies and business models.

e) Promote cost effective, clean distributed generation through SMUD programs.
Monitoring Method: GM Report
Frequency: Annual
It is a core value of SMUD to provide its customers and community with a sustainable power supply using an integrated resource planning process.

A sustainable power supply is one that reduces SMUD’s greenhouse gas (GHG) emissions to serve retail customer load to Zero by 2030. Zero GHG emissions is achieved through investments in energy efficiency, clean distributed resources, renewables portfolio standard (RPS) eligible renewables, energy storage, large hydroelectric generation, clean and emissions free fuels, and new technologies and
business models. Additionally, SMUD will continue pursuing GHG savings through vehicle, building and equipment electrification.

SMUD shall assure reliability of the system, minimize environmental impacts on land, habitat, water and air quality, and maintain competitive rates relative to other California electricity providers.

To guide SMUD in its resource evaluation and investment, the Board sets the following energy supply goal:

<table>
<thead>
<tr>
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</tr>
<tr>
<td>2030 - beyond</td>
<td>0</td>
</tr>
</tbody>
</table>

In keeping with this policy, SMUD shall also achieve the following:

a) Pursue energy efficiency and electrification to reduce carbon emissions by 365,000 metric tons from buildings and 1,000,000 metric tons from transportation in 2030 (the equivalent of 112,000 single family homes and 288,000 passenger vehicles electrified).

b) Procure renewable resources to meet or exceed the state’s mandate of 33% of SMUD’s retail sales by 2020, 44% by 2024, 52% by 2027, and 60% of its retail sales by 2030 and thereafter, excluding additional renewable energy acquired for certain customer programs.

c) In meeting GHG reduction goals, SMUD shall:
   1. Emphasize local and regional benefits.
   2. Improve equity for under-served communities.

d) Explore, develop, and demonstrate emerging GHG-free technologies and business models.

e) Promote cost effective, clean distributed generation through SMUD programs.

Monitoring Method: GM Report
Frequency: Annual
RESOLUTION NO. ______________

BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF THE SACRAMENTO MUNICIPAL UTILITY DISTRICT:

This Board approves the revisions to Strategic Direction SD-9,

Resource Planning, substantially in the form as set forth in Attachment ____.
TO
1. Gary King
2. Jennifer Davidson
3.
4.
5.
6.
7.
8.
9. Legal
10. CEO & General Manager

Requested Action: Provide SMUD’s financial results for the year-to-date period in 2021.

Summary: Staff will present SMUD’s financial results for the year-to-date period in 2021 to the Board of Directors.

Board Policy: GP-3, Board Job Description

Benefits: Provides Board members with information regarding SMUD’s financial condition.

Cost/Budgeted: n/a

Alternatives: None

Affected Parties: Accounting

Coordination: Accounting

Presenter: Lisa Limcaco

Additional Links:
TO: Distribution
FROM: Kathy Ketchum / Lisa Limcaco

SUBJECT: FEBRUARY 2021 FINANCIAL RESULTS AND OPERATIONS DATA

We are attaching the financial and operating reports for the two months of 2021. They include sales and generation statistics and other selected data.

SMUD’s year-to-date net position increased $8.2 million compared to a $14.8 million decrease projected in the budget. We attribute the favorable variance of $23.0 million to higher operating and non-operating revenues, lower interest expenses and higher operating expenses.

We prepared these statements on the accrual basis of accounting, and they conform to generally accepted accounting principles. The bases for the budget amounts are:

1) Budgeted electric revenues are based on the Forecast of Revenues by the Pricing Department, adjusted for unbilled revenues; and

2) Budgeted operating expenses reflect the 2021 Budget approved by the Board of Directors on December 10, 2020.
SACRAMENTO MUNICIPAL UTILITY DISTRICT
EXECUTIVE SUMMARY
For the Two Months Ended February 28, 2021

Net Position
- SMUD's net position increased $8.2 million compared to a $14.8 million decrease projected in the budget. We attribute the favorable variance of $23.0 million to higher operating and non-operating revenues and lower interest expenses, offset by higher operating expenses.

Revenues
- Revenues from sales to customers were $199.6 million, which was $3.7 million (1.9 percent) higher than planned.
  o The variance was primarily due to a shift in customer load shape compared to plan resulting in an increase of $8.1 million and higher customer usage of $0.5 million, offset by a higher uncollectible provision of $4.8 million (due to COVID-19 and the moratorium on electric shut offs).
- Revenues under the California Global Warming Solutions Act (Assembly Bill [AB] - 32) were $3.6 million. This is due to carbon allowances sold through the state sanctioned quarterly auction.
- Non-cash revenues transferred to the rate stabilization fund was $3.6 million for AB-32. Funds are deferred until SMUD has qualified program expenses (projects that reduce carbon emissions) to recognize revenue.
- Non-cash revenues transferred from the rate stabilization fund was $1.7 million, of which $0.9 million was for programs helping to reduce carbon emissions and $0.8 million for LCFS electric vehicle programs.

Operating Expenses
- Purchased power expense of $49.2 million, less surplus power sales of $14.1 million, was $35.1 million, which was $2.2 million (6.6 percent) higher than planned.
  o Purchased power expense increased as a result of higher quantities purchased of $11.6 million, offset by lower prices of $9.4 million.
- SMUD's generation was lower by 179 GWh (15.3 percent).
  o Hydro generation was lower by 63 GWh (50.4 percent).
  o JPAs generation was lower by 116 GWh (11.5 percent).
- Production operations cost of $60.5 million, less gas sales of $31.0 million, was $29.6 million, which was $11.3 million (27.7 percent) lower than planned.
  o Fuel costs, net of gas sales, were $14.8 million lower due primarily to lower fuel prices of $12.1 million and lower fuel usage of $2.7 million. Lower prices resulted primarily from gas sales of $7.0 million due to market conditions resulting from extreme weather in the east and south.
  o Allowances expense were $2.9 million higher, primarily due to recording the 2020 Calpine Sutter greenhouse gas allowance obligation of $3.5 million.
  o System control and load dispatching expenses were $1.3 million higher, mainly due to timing differences for items budgeted in April.
- The "power margin", or sales to customers less cost of purchased power, production operations costs and gas hedges included in investment expense was $134.9 million, which was $12.8 million (10.5 percent) higher than planned. Power margin as a percentage of total operating revenues was 67.6 percent, which was 5.3 percent higher than planned.
- All other operating expenses were $120.1 million, which was $8.0 million (6.2 percent) lower than planned.
  o Administrative and general expenses were $6.8 million (25.8 percent) lower than planned. This is due to lower non-cash amortization of Governmental Accounting Standards Board (GASB) 75 Other Post-Employment Benefits amortization of $2.6 million, GASB 68 Pension amortization of $2.3 million and retiree medical expenses of $1.2 million, offset by higher miscellaneous general expenses of $0.9 million, due to labor.
  o Transmission and distribution maintenance expenses were $2.6 million (18.3 percent) higher than planned. This was mostly due to distribution maintenance for both station equipment and overhead lines of $1.7 million, which resulted from higher labor to restore power after the large storm.
  o Transmission and distribution operating expenses were $1.7 million (12.2 percent) lower than planned. This is mainly due to lower transmission-wheeling expense of $1.5 million, primarily due to lower transmission expenses and losses.
SACRAMENTO MUNICIPAL UTILITY DISTRICT
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
For the Month Ended February 28, 2021
(thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
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<tr>
<td><strong>OPERATING REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales to customers</td>
<td>$ 94,959</td>
<td>$ 96,216</td>
<td>$(1,257)</td>
<td>(1.3) %</td>
</tr>
<tr>
<td>Sales of surplus power</td>
<td>8,288</td>
<td>8,667</td>
<td>(379)</td>
<td>(4.4)</td>
</tr>
<tr>
<td>Sales of surplus gas</td>
<td>19,789</td>
<td></td>
<td>19,789</td>
<td>*</td>
</tr>
<tr>
<td>SB-1 revenue (deferral)/recognition, net</td>
<td>-</td>
<td>184</td>
<td>(184)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>AB32 revenue</td>
<td>3,560</td>
<td></td>
<td>3,560</td>
<td>*</td>
</tr>
<tr>
<td>LCFS revenue</td>
<td>6</td>
<td>286</td>
<td>(280)</td>
<td>(97.9)</td>
</tr>
<tr>
<td>Other electric revenue</td>
<td>2,362</td>
<td>2,581</td>
<td>(219)</td>
<td>(8.5)</td>
</tr>
<tr>
<td>Revenue to rate stabilization fund</td>
<td>(3,566)</td>
<td>-</td>
<td>(3,566)</td>
<td>*</td>
</tr>
<tr>
<td>Revenue from rate stabilization fund</td>
<td>800</td>
<td></td>
<td>800</td>
<td>*</td>
</tr>
<tr>
<td><strong>Total operating revenues</strong></td>
<td>126,198</td>
<td>107,934</td>
<td>18,264</td>
<td>16.9</td>
</tr>
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<table>
<thead>
<tr>
<th><strong>OPERATING EXPENSES</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Purchased power</td>
<td>23,053</td>
<td>25,266</td>
<td>(2,213)</td>
<td>(8.8)</td>
</tr>
<tr>
<td>Production</td>
<td>31,246</td>
<td>18,337</td>
<td>12,909</td>
<td>70.4</td>
</tr>
<tr>
<td>Transmission and distribution</td>
<td>6,232</td>
<td>6,925</td>
<td>(693)</td>
<td>(10.0)</td>
</tr>
<tr>
<td>Customer accounts</td>
<td>4,112</td>
<td>4,530</td>
<td>(418)</td>
<td>(9.2)</td>
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<tr>
<td>Customer service and information</td>
<td>4,604</td>
<td>4,985</td>
<td>(381)</td>
<td>(7.6)</td>
</tr>
<tr>
<td>Administrative and general</td>
<td>9,372</td>
<td>13,073</td>
<td>(3,701)</td>
<td>(28.3)</td>
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<tr>
<td>Public good</td>
<td>3,250</td>
<td>3,598</td>
<td>(348)</td>
<td>(9.7)</td>
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<tr>
<td><strong>Total operations</strong></td>
<td>81,869</td>
<td>76,714</td>
<td>5,155</td>
<td>6.7</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Production</td>
<td>2,026</td>
<td>2,711</td>
<td>(685)</td>
<td>(25.3)</td>
</tr>
<tr>
<td>Transmission and distribution</td>
<td>6,841</td>
<td>7,071</td>
<td>(230)</td>
<td>(3.3)</td>
</tr>
<tr>
<td><strong>Total maintenance</strong></td>
<td>8,867</td>
<td>9,782</td>
<td>(915)</td>
<td>(9.4)</td>
</tr>
<tr>
<td>Depreciation</td>
<td>17,792</td>
<td>17,757</td>
<td>35</td>
<td>0.2</td>
</tr>
<tr>
<td>Amortization of regulatory asset</td>
<td>2,929</td>
<td>3,073</td>
<td>(144)</td>
<td>(4.7)</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>111,457</td>
<td>107,326</td>
<td>4,131</td>
<td>3.8</td>
</tr>
</tbody>
</table>

| **OPERATING INCOME**   | 14,741       | 608         | 14,133     | *                             |

| **NON-OPERATING REVENUES AND EXPENSES** |              |             |            |                               |
| Other revenues/(expenses) |              |             |            |                               |
| Interest income           | 731          | 500         | 231        | 46.2                          |
| Investment revenue (expense) | (185)      | (188)       | 3          | 1.6                           |
| Other income (expense) - net | 579         | 806         | (227)      | (28.2)                        |
| Unrealized holding gains (losses) | (279)     | -           | (279)      | *                             |
| Revenue - CIAC            | 1,498        | 1,104       | 394        | 35.7                          |
| **Total other revenues**  | 2,344        | 2,222       | 122        | 5.5                           |
| Interest charges          |              |             |            |                               |
| Interest on long-term debt | 9,269       | 9,351       | (82)       | (0.9)                         |
| Interest on commercial paper | 16          | 137         | (121)      | (88.3)                        |
| **Total interest charges** | 9,285       | 9,488       | (203)      | (2.1)                         |

| **CHANGE IN NET POSITION** | $ 7,800 | ($6,658) | $ 14,458 | 217.2% |

* Equals 1000% or greater.
## SACRAMENTO MUNICIPAL UTILITY DISTRICT

**STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**

For the Two Months Ended February 28, 2021

(Thousands of dollars)

### OPERATING REVENUES

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales to customers</strong></td>
<td>$199,579</td>
<td>$195,900</td>
<td>$3,679</td>
<td>1.9%</td>
</tr>
<tr>
<td><strong>Sales of surplus power</strong></td>
<td>14,106</td>
<td>17,970</td>
<td>(3,864)</td>
<td>(21.5)</td>
</tr>
<tr>
<td><strong>Sales of surplus gas</strong></td>
<td>30,968</td>
<td>-</td>
<td>30,968</td>
<td>*</td>
</tr>
<tr>
<td><strong>SB-1 revenue (deferral)/recognition, net</strong></td>
<td>-</td>
<td>332</td>
<td>(332)</td>
<td>(100.0)</td>
</tr>
<tr>
<td><strong>AB32 revenue</strong></td>
<td>3,560</td>
<td>-</td>
<td>3,560</td>
<td>*</td>
</tr>
<tr>
<td><strong>LCFS revenue</strong></td>
<td>6</td>
<td>658</td>
<td>(652)</td>
<td>(99.1)</td>
</tr>
<tr>
<td><strong>Other electric revenue</strong></td>
<td>5,233</td>
<td>5,020</td>
<td>213</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Revenue to rate stabilization fund</strong></td>
<td>(3,566)</td>
<td>-</td>
<td>(3,566)</td>
<td>*</td>
</tr>
<tr>
<td><strong>Revenue from rate stabilization fund</strong></td>
<td>1,736</td>
<td>-</td>
<td>1,736</td>
<td>*</td>
</tr>
<tr>
<td><strong>Total operating revenues</strong></td>
<td>251,622</td>
<td>219,880</td>
<td>31,742</td>
<td>14.4</td>
</tr>
</tbody>
</table>

### OPERATING EXPENSES

**Operations**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purchased power</strong></td>
<td>49,248</td>
<td>50,926</td>
<td>(1,678)</td>
<td>(3.3)</td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>60,533</td>
<td>40,903</td>
<td>19,630</td>
<td>48.0</td>
</tr>
<tr>
<td><strong>Transmission and distribution</strong></td>
<td>12,324</td>
<td>14,031</td>
<td>(1,707)</td>
<td>(12.2)</td>
</tr>
<tr>
<td><strong>Customer accounts</strong></td>
<td>8,875</td>
<td>9,564</td>
<td>(689)</td>
<td>(7.2)</td>
</tr>
<tr>
<td><strong>Customer service and information</strong></td>
<td>10,218</td>
<td>10,407</td>
<td>(189)</td>
<td>(1.8)</td>
</tr>
<tr>
<td><strong>Administrative and general</strong></td>
<td>19,457</td>
<td>26,211</td>
<td>(6,754)</td>
<td>(25.8)</td>
</tr>
<tr>
<td><strong>Public good</strong></td>
<td>6,683</td>
<td>7,211</td>
<td>(528)</td>
<td>(7.3)</td>
</tr>
<tr>
<td><strong>Total operations</strong></td>
<td>167,338</td>
<td>159,253</td>
<td>8,085</td>
<td>5.1</td>
</tr>
</tbody>
</table>

**Maintenance**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production</strong></td>
<td>4,513</td>
<td>4,974</td>
<td>(461)</td>
<td>(9.3)</td>
</tr>
<tr>
<td><strong>Transmission and distribution</strong></td>
<td>16,583</td>
<td>14,016</td>
<td>2,567</td>
<td>18.3</td>
</tr>
<tr>
<td><strong>Total maintenance</strong></td>
<td>21,096</td>
<td>18,990</td>
<td>2,106</td>
<td>11.1</td>
</tr>
</tbody>
</table>

**Depreciation**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>229,865</td>
<td>219,902</td>
<td>9,963</td>
<td>4.5</td>
</tr>
</tbody>
</table>

**Operating Income (Loss)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>21,757</strong></td>
<td>(22)</td>
<td>21,779</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

### NON-OPERATING REVENUES AND EXPENSES

**Other revenues/(expenses)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest income</strong></td>
<td>1,573</td>
<td>992</td>
<td>581</td>
<td>58.6</td>
</tr>
<tr>
<td><strong>Investment revenue (expense)</strong></td>
<td>(374)</td>
<td>(376)</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Other income (expense) - net</strong></td>
<td>1,639</td>
<td>1,340</td>
<td>299</td>
<td>22.3</td>
</tr>
<tr>
<td><strong>Unrealized holding gains (losses)</strong></td>
<td>(489)</td>
<td>-</td>
<td>(489)</td>
<td>*</td>
</tr>
<tr>
<td><strong>Revenue - CIAC</strong></td>
<td>2,993</td>
<td>2,207</td>
<td>786</td>
<td>35.6</td>
</tr>
<tr>
<td><strong>Total other revenues</strong></td>
<td>5,342</td>
<td>4,163</td>
<td>1,179</td>
<td>28.3</td>
</tr>
</tbody>
</table>

**Interest charges**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest on long-term debt</strong></td>
<td>18,503</td>
<td>18,701</td>
<td>(198)</td>
<td>(1.1)</td>
</tr>
<tr>
<td><strong>Interest on commercial paper</strong></td>
<td>412</td>
<td>273</td>
<td>139</td>
<td>50.9</td>
</tr>
<tr>
<td><strong>Total interest charges</strong></td>
<td>18,915</td>
<td>18,974</td>
<td>(59)</td>
<td>(0.3)</td>
</tr>
</tbody>
</table>

**Change in Net Position**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over/Under</th>
<th>Percent of Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$8,184</strong></td>
<td>$ (14,833)</td>
<td>$ 23,017</td>
<td></td>
<td>155.2 %</td>
</tr>
</tbody>
</table>

* Equals 1000% or greater.
## SACRAMENTO MUNICIPAL UTILITY DISTRICT
### SOURCES AND USES OF ENERGY - COMPARED TO BUDGET
#### For the Period Ended February 28, 2021

<table>
<thead>
<tr>
<th>Sources of Energy (GWh)</th>
<th>Month</th>
<th>Increase (Decrease)</th>
<th>Year-to-Date</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Budget</td>
<td>Percentage</td>
<td>Actual</td>
</tr>
<tr>
<td>Net Generated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydro</td>
<td>38</td>
<td>60</td>
<td>(36.7) %</td>
<td>62</td>
</tr>
<tr>
<td>Carson Ice (CVFA)</td>
<td>22</td>
<td>16</td>
<td>37.5 %</td>
<td>49</td>
</tr>
<tr>
<td>Procter &amp; Gamble (SCA)</td>
<td>58</td>
<td>51</td>
<td>13.7 %</td>
<td>107</td>
</tr>
<tr>
<td>Campbell Soup Project (SPA)</td>
<td>26</td>
<td>26</td>
<td>0.0 %</td>
<td>39</td>
</tr>
<tr>
<td>SMUD Financing Authority (SFA)</td>
<td>327</td>
<td>330</td>
<td>(0.9) %</td>
<td>694</td>
</tr>
<tr>
<td>Other</td>
<td>34</td>
<td>28</td>
<td>21.4 %</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total net generation</strong></td>
<td>505</td>
<td>511</td>
<td>(1.2) %</td>
<td>993</td>
</tr>
</tbody>
</table>

Purchased Power less transmission losses:
- Avangrid: Actual 4, Budget 4, (0.0) %, Year-to-Date 7, (21.8) %
- Calpine Sutter: Actual 18, Budget 50, (64.0) %, Year-to-Date 40, (83.3) %
- Feed in Tariff: Actual 13, Budget 11, 18.2 %, Year-to-Date 21, 20 %
- Grady Wind: Actual 61, Budget 78, (21.8) %, Year-to-Date 136, 160 %
- Great Valley Solar: Actual 11, Budget 9, 22.2 %, Year-to-Date 19, 16 %
- Kiefer - Greenergy: Actual 9, Budget 9, 0.0 %, Year-to-Date 18, 19 %
- Patua: Actual 10, Budget 13, (23.1) %, Year-to-Date 22, 27 %
- Rancho Seco PV II: Actual 18, Budget 19, (5.3) %, Year-to-Date 32, 32 %
- Simpson: Actual 23, Budget 27, (14.8) %, Year-to-Date 50, 43 %
- WAPA: Actual 3, Budget 25, (88.0) %, Year-to-Date 13, 46 %
- WSPP and other: Actual 196, Budget 165, 18.8 %, Year-to-Date 496, 182 %
- Other long term power: Actual 23, Budget 28, (17.9) %, Year-to-Date 44, 55 %

**Total net purchases:**
- Actual 389, Budget 438, (11.2) %, Year-to-Date 898, 847 %

**Total sources of energy:**
- Actual 894, Budget 949, (5.8) %, Year-to-Date 1,891, 2,019 %

### Uses of energy:
- SMUD electric sales and usage: Actual 708, Budget 725, (2.3) %, Year-to-Date 1,532, 1,526 %
- Surplus power sales: Actual 159, Budget 200, (20.5) %, Year-to-Date 293, 400 %
- System losses: Actual 27, Budget 24, 12.5 %, Year-to-Date 66, 93 %

**Total uses of energy:**
- Actual 894, Budget 949, (5.8) %, Year-to-Date 1,891, 2,019 %

*Change equals 1000% or more.*

Net generation is lower than budget for the two-month period.
- Hydro generation is lower than planned (50.4 percent).
- JPA generation is lower than planned (11.5 percent).

Purchased power, less surplus power sales, is higher than plan (35.3 percent).
## SACRAMENTO MUNICIPAL UTILITY DISTRICT
### STATEMENTS OF NET POSITION

February 28, 2021 and February 29, 2020

(thousands of dollars)

### ASSETS

<table>
<thead>
<tr>
<th></th>
<th>SMUD</th>
<th>CVFA</th>
<th>SCA</th>
<th>SFA</th>
<th>SPA</th>
<th>NCEA</th>
<th>NCGA #1</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELECTRIC UTILITY PLANT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant in service, original cost</td>
<td>$ 5,451,755</td>
<td>$ 153,579</td>
<td>$ 197,578</td>
<td>$ 390,508</td>
<td>$ 208,220</td>
<td>-</td>
<td>-</td>
<td>$ 6,401,640</td>
<td>$ 6,211,817</td>
</tr>
<tr>
<td>Less accumulated depreciation</td>
<td>2,544,819</td>
<td>123,761</td>
<td>150,440</td>
<td>186,069</td>
<td>161,864</td>
<td>-</td>
<td>-</td>
<td>3,166,953</td>
<td>2,960,341</td>
</tr>
<tr>
<td>Plant in service - net</td>
<td>2,906,936</td>
<td>29,818</td>
<td>47,138</td>
<td>204,439</td>
<td>46,356</td>
<td>-</td>
<td>-</td>
<td>3,234,687</td>
<td>3,231,476</td>
</tr>
<tr>
<td>Construction work in progress</td>
<td>489,073</td>
<td>372</td>
<td>562</td>
<td>39</td>
<td>746</td>
<td>-</td>
<td>-</td>
<td>491,813</td>
<td>392,932</td>
</tr>
<tr>
<td>Investment in Joint Power Agencies</td>
<td>305,113</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>22,679</td>
<td>15,825</td>
</tr>
<tr>
<td>Total electric utility plant - net</td>
<td>3,701,922</td>
<td>30,190</td>
<td>47,720</td>
<td>204,477</td>
<td>47,104</td>
<td>-</td>
<td>-</td>
<td>3,748,979</td>
<td>3,640,233</td>
</tr>
<tr>
<td><strong>RESTRICTED ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue bond reserve</td>
<td>3,813</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,813</td>
<td>4,748</td>
</tr>
<tr>
<td>Restricted for payment of debt service</td>
<td>59,490</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>59,490</td>
<td>56,830</td>
</tr>
<tr>
<td>JPA funds</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8,201</td>
<td>13,241</td>
</tr>
<tr>
<td>Nuclear decommissioning trust funds</td>
<td>8,873</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8,873</td>
<td>8,819</td>
</tr>
<tr>
<td>Rate stabilization fund</td>
<td>170,596</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>170,596</td>
<td>140,839</td>
</tr>
<tr>
<td>Other funds</td>
<td>18,366</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,000</td>
<td>3,602</td>
</tr>
<tr>
<td>Due (to) from unrestricted funds (decommissioning)</td>
<td>(6,684)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(6,684)</td>
<td>(6,684)</td>
</tr>
<tr>
<td>Due (to) from restricted funds (decommissioning)</td>
<td>6,684</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,684</td>
<td>6,684</td>
</tr>
<tr>
<td>Less current portion</td>
<td>(70,218)</td>
<td>-</td>
<td>-</td>
<td>(8,201)</td>
<td>-</td>
<td>(16,151)</td>
<td>(17,359)</td>
<td>(111,929)</td>
<td>(118,987)</td>
</tr>
<tr>
<td>Total restricted assets</td>
<td>188,880</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>90</td>
<td>188,970</td>
<td>157,849</td>
</tr>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash, cash equivalents and investments</td>
<td>575,547</td>
<td>5,746</td>
<td>19,623</td>
<td>15,111</td>
<td>11,225</td>
<td>-</td>
<td>-</td>
<td>627,252</td>
<td>477,704</td>
</tr>
<tr>
<td>Unrestricted</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Restricted</td>
<td>70,218</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>16,151</td>
<td>17,359</td>
</tr>
<tr>
<td>Accounts receivable - net</td>
<td>237,925</td>
<td>3,085</td>
<td>6,879</td>
<td>19,428</td>
<td>2,743</td>
<td>3,957</td>
<td>2,158</td>
<td>221,953</td>
<td>180,631</td>
</tr>
<tr>
<td>Energy efficiency loans due within one year</td>
<td>2,691</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,691</td>
<td>3,021</td>
</tr>
<tr>
<td>Interest receivable</td>
<td>1,125</td>
<td>10</td>
<td>10</td>
<td>225</td>
<td>1,309</td>
<td>2,407</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Regulatory costs to be recovered within one year</td>
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<td>-</td>
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<td><strong>TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES</strong></td>
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<td>$ 78,656</td>
<td>$ 260,582</td>
<td>$ 65,721</td>
<td>$ 553,822</td>
<td>$ 197,053</td>
<td>$ 6,837,688</td>
<td>$ 6,521,575</td>
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*Numbers may not add across due to elimination entries not shown on this sheet.*
## SACRAMENTO MUNICIPAL UTILITY DISTRICT

### STATEMENTS OF NET POSITION

February 28, 2021 and February 29, 2020  
(thousands of dollars)

### LIABILITIES AND NET ASSETS

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<th>SCA</th>
<th>SFA</th>
<th>SPA</th>
<th>NCEA</th>
<th>NCGA #1</th>
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<th>2020</th>
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<td>Commercial paper notes</td>
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<td>18,450</td>
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<td>119,305</td>
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<td>23,356</td>
<td>366,636</td>
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<tr>
<td>Accrued decommissioning - net</td>
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<td>424,820</td>
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<td>120</td>
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<td>94,504</td>
<td>92,517</td>
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<td>8,633</td>
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<td>-</td>
<td>120</td>
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<td>638,820</td>
<td>734,797</td>
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<td>559,706</td>
<td>186,841</td>
<td>4,257,940</td>
<td>4,114,221</td>
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<td>Accumulated increase in fair value of hedging derivatives</td>
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<td>518,929</td>
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<td>Unamortized bond gains - other</td>
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<td>Balance at beginning of year</td>
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<td>119,915</td>
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<td>10,147</td>
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<td>(265)</td>
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<td>8,184</td>
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<td>120,745</td>
<td>63,238</td>
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<td>10,212</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>$ 5,973,648</td>
<td>$ 43,262</td>
<td>$ 78,656</td>
<td>$ 260,582</td>
<td>$ 65,721</td>
<td>$ 553,822</td>
<td>$ 197,053</td>
<td>$ 6,837,688</td>
<td>$ 6,521,575</td>
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*Numbers may not add across due to elimination entries not shown on this sheet.
## SACRAMENTO MUNICIPAL UTILITY DISTRICT
### STATEMENTS OF CASH FLOWS
#### For the Period Ended February 28, 2021

(therousands of dollars)

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<th>Month</th>
<th>Year to Date</th>
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<td>CASH FLOWS FROM OPERATING ACTIVITIES</td>
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<td>Receipts from customers</td>
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<td>Receipts from surplus power and gas sales</td>
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<td>Other receipts</td>
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<td>Payments to employees - payroll and other</td>
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<td>Payments for wholesale power and gas purchases</td>
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<tr>
<td>Payments to vendors/others</td>
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</tr>
<tr>
<td><strong>Net cash provided by (used in) operating activities</strong></td>
<td>14,546</td>
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</table>

| CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES | | |
| Interest on debt | - | (11,274) |
| **Net cash used in noncapital financing activities** | - | (11,274) |

| CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES | | |
| Construction expenditures | (16,340) | (36,708) |
| Contributions in aid of construction | 1,710 | 3,990 |
| Interest on debt | (44,022) | (47,025) |
| **Net cash used in capital and related financing activities** | (58,652) | (79,743) |

| CASH FLOWS FROM INVESTING ACTIVITIES | | |
| Sales and maturities of securities | 41,371 | 85,164 |
| Interest and dividends received | 1,252 | 2,773 |
| Investment revenue/expenses - net | (185) | (373) |
| **Net cash provided by investing activities** | 42,438 | 87,564 |

| Net decrease in cash and cash equivalents | (1,668) | (23,301) |
| Cash and cash equivalents at the beginning of the month and year | 716,978 | 738,611 |
| Cash and cash equivalents at February 28, 2021 | $715,310 | $715,310 |

| Cash and cash equivalents included in: | | |
| Unrestricted cash and cash equivalents | $663,067 | $663,067 |
| Restricted and designated cash and cash equivalents | 38,264 | 38,264 |
| Restricted and designated assets (a component of the total of $188,970 at February 28, 2021) | 13,979 | 13,979 |

| Cash and cash equivalents at February 28, 2021 | $715,310 | $715,310 |
### Reports Issued by Audit and Quality Services

<table>
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<th>Title</th>
<th>Report Number</th>
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<td>General Order 174</td>
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**Board Policy:**

Board-Staff Linkage, Board-Internal Auditor Relationship (BL-3)

**Benefits:**

n/a

**Cost/Budgeted:**

n/a

**Alternatives:**

n/a

**Affected Parties:**

Board, Internal Auditor

**Coordination:**

n/a

**Presenter:**

Claire Rogers, Director of Audit Services

**Additional Links:**

Yes

**NARRATIVE:**

Requested Action: Informational agenda item to provide Board Members with the opportunity to ask questions and/or discuss recent reports issued by Audit and Quality Services.

Summary: Reports Issued by Audit and Quality Services:

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<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>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Claire Rogers</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>DEPARTMENT</td>
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**SMUD-1516 1/16 Forms Management**

Page 1
Attached for your review is the Status of Recommendations report for the First Quarter of 2021. Prior to this report being finalized, all outstanding recommendations were given to the responsible department Manager/Director for follow up.

The attached report includes all outstanding items as of March 31, 2021 regardless of their risk ranking.

Two open items were closed during the reporting period and were reviewed to assure implementation in accordance with the management response. None of the remaining 4 items are currently overdue. The chart below is a breakdown by age and risk of the outstanding items regardless of their risk ranking:

If you need further information or wish to discuss any aspect of the report, please contact me at 732-7122, or Claire.Rogers@smud.org.
<table>
<thead>
<tr>
<th>RISK</th>
<th>RECOMMENDATION</th>
<th>RESPONSIBLE DEPARTMENT</th>
<th>STATUS / DATE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>Enterprise Performance should update its project management templates to include clear guidance on communication plans, benefits realization and analysis, resources, and quality management. As more projects are completed under the project management process, EP should evaluate whether the required deliverable documents provide sufficient information.</td>
<td>Planning, Pricing &amp; Enterprise Performance Department</td>
<td>Date Issued 12/06/2018</td>
<td>The development of deliverable document guidance related to communications plans, benefits realization and analysis, and quality management will be incorporated into the changes made with the implementation of the PPM tool. Because it would not be efficient to update these deliverable documents before making additional changes with the PPM tool, the due date for this corrective action will be extended to align with implementation of the tool. Note: Due date has been extended to April 15, 2021 to accommodate changing priorities associated with SMUD’s COVID-19 response.</td>
</tr>
<tr>
<td>28006647-01</td>
<td></td>
<td></td>
<td>Outstanding 08/15/2019</td>
<td></td>
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<tr>
<td>Medium</td>
<td>Policies and Procedures</td>
<td></td>
<td>Revised to 04/15/2021</td>
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<td>3 Extensions</td>
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<tr>
<td>Project Management</td>
<td>EP should update project management process guidance to include the process for reviewing key deliverable documents and clarify when EP may request resubmission of incomplete or inaccurate documents. EP should also ensure that updated guidance is communicated to project managers and PMOs.</td>
<td>Planning, Pricing &amp; Enterprise Performance Department</td>
<td>Date Issued 12/06/2018</td>
<td>As stated in the previous management response, communication and accountability will improve upon implementation of the PPM tool. In the interest of efficiency, EP will extend the corrective action due date to align with implementation of the tool, as job aids will be updated and training provided with the roll out of the tool. Note: Due date has been extended to April 15, 2021 to accommodate changing priorities associated with SMUD’s COVID-19 response.</td>
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<tr>
<td>28006647-02</td>
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<td>Outstanding 10/15/2019</td>
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<tr>
<td>Medium</td>
<td>Policies and Procedures</td>
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<td>3 Extensions</td>
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<tr>
<td>Project Management</td>
<td>EP should define the roles and responsibilities of project management offices, and then evaluate existing PMO structures to determine what will best support the needs of the business.</td>
<td>Planning, Pricing &amp; Enterprise Performance Department</td>
<td>Date Issued 12/06/2018</td>
<td>Based on feedback from Executives, Enterprise Performance will not be making any changes or clarifications to the organizational structure of PMOs. However, it is continuing to work on the clarification of PMO roles and responsibilities. The corrective action due date will be extended as EP determines how best to proceed.</td>
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<tr>
<td>28006647-03</td>
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<td>Outstanding 08/15/2019</td>
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<tr>
<td>Medium</td>
<td>Policies and Procedures</td>
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<td>3 Extensions</td>
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</table>
# STATUS OF RECOMMENDATIONS AT 03/31/2021

<table>
<thead>
<tr>
<th>RISK</th>
<th>RECOMMENDATION</th>
<th>RESPONSIBLE DEPARTMENT</th>
<th>STATUS / DATE</th>
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<tr>
<td>Policies and Procedures</td>
<td>Revised to 04/15/2021</td>
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<td>Note: Due date has been extended to April 15, 2021 to accommodate changing priorities associated with SMUD's COVID-19 response.</td>
</tr>
<tr>
<td>Project Management</td>
<td>Enterprise Performance should require that all projects are tracked in a central database.</td>
<td>Planning, Pricing &amp; Enterprise Performance Department</td>
<td>Date Issued 12/06/2018</td>
<td>Note: Due date has been extended to April 15, 2021 to accommodate changing priorities associated with SMUD's COVID-19 response.</td>
</tr>
<tr>
<td>28006647-04 Medium Policies and Procedures</td>
<td>Date Outstanding 10/15/2020 1 Extension Revised to 04/15/2021</td>
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</table>
Audit and Quality Services (AQS) has completed a review of General Order 174 (GO 174). The purpose of the audit was to evaluate if SMUD meets the standard of care defined in GO 174. The audit was included in the 2021 AQS audit plan.

Adopted in 2012 by the California Public Utilities Commission (CPUC), GO 174 requires electric utilities in their jurisdiction to establish and follow a substation inspection program. GO 174 helps formulate uniform requirements for substation inspection programs, which in turn helps promote the safety of workers and the public and enables adequacy of service. In response to this CPUC statute, SMUD developed the Distribution Substation Visual Inspection Plan (DSVIP). The DSVIP specifies the inspection activities, frequency of the inspections, and the record keeping and retention requirements. While not regulated by the CPUC, SMUD has elected to meet the requirements outlined in GO 174.

AQS completed an evaluation of SMUD’s policies, procedures, and processes associated with distribution substation inspections and determined they are in alignment with GO 174 requirements. In addition, we determined that SMUD adheres to distribution substation inspection timeframes established by the DSVIP. AQS also tested a sample of completed Distribution Substation Inspection Reports (DSIRs) to determine compliance with GO 174 and DSVIP record keeping and retention requirements, and whether corrective actions identified within DSIRs were completed in an appropriate timeframe with no exceptions noted.

AQS would like to thank Transmission and Distribution Maintenance Planning and Substation Maintenance for their cooperation and support in conducting this audit.
Audit & Quality Services

General Order 174

Audit Report 28007282
General Order 174
Audit & Quality Services Report

Background:
General Order 174 (GO 174) was adopted in 2012 by the California Public Utilities Commission (CPUC) and requires electric utilities in their jurisdiction to establish and follow a substation inspection program. GO 174 helps formulate uniform requirements for substation inspection programs, which in turn helps promote the safety of workers and the public and enables adequacy of service.

In response to GO 174, SMUD developed the Distribution Substation Visual Inspection Plan (DSVIP). The DSVIP summarizes inspections that must be conducted at Distribution Substations only; it does not apply to Customer Substations (as defined in GO 174) and/or facilities that are subject to NERC/WECC reliability standards, such as many of SMUD’s generation substations and all of SMUD’s transmission substations. The DSVIP specifies the inspection activities, frequency of the inspections, and record keeping and retention requirements. While not regulated by the CPUC, SMUD has elected to meet the requirements outlined in GO 174.

SMUD’s Transmission and Distribution Maintenance Planning (TDMP) group within Distribution Operations and Maintenance develops projects and programs that ensure SMUD’s compliance with Federal and State regulations. TDMP is responsible for the development of yearly operation and maintenance (O&M) and capital plans for all SMUD-owned substations and transmission & distribution lines. This includes developing maintenance plans within SAP for the inspection of distribution substations. In addition, SMUD’s Substation Maintenance group within Substation, Telecomm, and Metering Assets is responsible for completing inspections of distribution substations and documenting the results of the inspection on the Distribution Substation Inspection Report (DSIR).

Scope:
Our audit scope included TDMP’s and Substation Maintenance’s processes for the inspections of distribution substations and corrective maintenance work, as defined by GO 174 and internal procedures. Specifically, for distribution substation inspections completed January 1, 2019 through October 31, 2020.

Objectives:
The objectives of the audit were to:
1. Evaluate SMUD’s policies, procedures, and processes associated with distribution substation inspections to determine if they meet GO 174 requirements.
2. Determine whether SMUD adheres to distribution substation inspection timeframes in accordance with the DSVIP.
3. For a sample of completed distribution substation inspections, determine compliance with GO 174 and the DSVIP. Specifically:
a. Whether SMUD adhered to record keeping requirements within completed DSIRs which includes identification of the inspector, date of the inspection, a brief description of any deficiencies or condition rating, and when applicable, the scheduled date of corrective action needed.
b. Whether completed DSIRs obtained supervisory review.
c. Whether DSIRs are retained in accordance with their retention policy.
d. Whether corrective actions identified within the DSIRs are completed within an appropriate timeframe.

Summary:
AQS interviewed staff from TDMP and Substation Maintenance to obtain an understanding of each groups processes relating to GO 174. We reviewed the DSVIP and compared it to the requirements of GO 174 and determined that the DSVIP sufficiently met all requirements. Similarly, we reviewed the DSIR to ensure that it was in alignment with the requirements of the DSVIP. AQS reviewed the distribution substation list for 2019 to evaluate if it was complete and accurate in order to ensure all substations that should have been scheduled for inspection were included with no exceptions noted. In addition, we randomly sampled 18 distribution substations and determined that, during our scope period, inspections were completed in accordance with the timeframes specified by the DSVIP. Further, AQS tested record keeping and retention requirements and whether corrective actions identified within DSIRs were completed within an appropriate timeframe by reviewing each DSIR for the 18 distribution substations sampled, over 370 DSIRs and 24 corrective actions in SAP, with no exceptions noted.

Conclusion:
SMUD’s policies, procedures, and processes associated with distribution substation inspections are consistent with GO 174 requirements. For the sample selected for testing, distribution substation inspections were completed within the timeframes established in the DSVIP, DSIR record keeping and retention requirements were met, and corrective actions identified within DSIRs were completed within an appropriate timeframe.

AQS would like to thank Transmission and Distribution Maintenance Planning and Substation Maintenance for their cooperation and support in conducting this audit.
## Summary of SMUD’s current Power Supply Costs

### Requested Action:
Provide the summary of SMUD’s current Power Supply Costs.

### Summary:
Staff will present the summary of SMUD’s current Power Supply Costs to the Board of Directors.

### Board Policy:
GP-3, Board Job Description

### Benefits:
Provides Board members with current power supply costs information for SMUD.

### Cost/Budgeted:
n/a

### Alternatives:
n/a

### Affected Parties:
Planning, Pricing & Enterprise Performance

### Coordination:
Planning, Pricing & Enterprise Performance

### Presenter:
Jennifer Davidson, Chief Financial Officer

### Additional Links: