

Board of Directors Meeting Agenda

Date: November 17, 2022

Time: 5:30 p.m.

Location: Virtual Meeting (online)

AGENDA

SACRAMENTO MUNICIPAL UTILITY DISTRICT BOARD OF DIRECTORS MEETING

Pursuant to Government Code section 54953(e) and the Emergency Board Meeting Procedures adopted by the SMUD Board of Directors, the regular Board meeting and other public meetings are currently conducted solely via virtual (online/teleconference) meeting to align with state, local, and federal guidelines 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 his 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.

November 17, 2022 – 5:30 p.m.

Zoom Webinar Link: [Join SMUD Board of Directors Meeting Here](#)

Webinar/Meeting ID: 161 019 8948

Passcode: 088403

Phone Dial-in Number: 1-669-254-5252 or 1-833-568-8864 (Toll Free)

Call to Order.

a. Roll Call.

1. Approval of the Agenda.

2. Committee Chair Reports.

- a. Committee Chair report of November 15, 2022, Finance and Audit Committee
- b. Committee Chair report of November 16, 2022, Policy Committee

Items 7 through 9 were reviewed by the November 15, 2022, Finance and Audit Committee. Items 10 through 14 were reviewed by the November 16, 2022, Policy 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 October 16, 2022, through November 15, 2022.
- 4. Approval of the minutes of the special meeting of October 12, 2022.
- 5. Approval of the minutes of the regular meeting of October 20, 2022.
- 6. Approval of the minutes of the special meeting of November 2, 2022.
- 7. Approve Contract Change No. 2 to Contract No. 4500099793 for Workers' Compensation & Short Term / Long Term Disability Third Party Claims Administration Services with **Intercare Holdings Insurance Services, Inc.** to extend the contract expiration date by two years from December 31, 2022, to December 31, 2024, and increase the contract not-to-exceed amount by \$1 million, from \$2.12 million to \$3.12 million. **Finance and Audit Committee 11/15. (Dr. Markisha Webster)**
- 8. Authorize the Chief Executive Officer and General Manager to award contracts to **Arrow Construction, Sierra National Construction, Inc., and Mountain G. Enterprises, Inc.** for Civil Annual Construction Services for a contract term of three years from November 21, 2022, to November 20, 2025, for a total aggregate contract not-to-exceed amount of \$100 million. **Finance and Audit Committee 11/15. (Frankie McDermott)**
- 9. Make findings pursuant to Government Code section 54953(e) to continue holding meetings virtually during proclaimed state of emergency (recurring item, every 30 days). **Finance and Audit Committee 11/15. (Laura Lewis)**
- 10. Accept the monitoring report for **Strategic Direction SD-16, Information Management and Security**. **Policy Committee 11/16. (Suresh Kotha)**
- 11. Accept the monitoring report for **Strategic Direction SD-17, Enterprise Risk Management**. **Policy Committee 11/16. (Jennifer Davidson)**
- 12. Authorize SMUD's Accountant to defer recognition of certain expenses related to the net Pension and net other post-employment benefits (OPEB) liability in order to match such costs in the appropriate accounting period for rate-making purposes. **Policy Committee 11/16. (Jennifer Davidson)**

13. Authorize SMUD's Accountant to:
- a. Utilize \$41 million of deferred operating revenues in order to offset future Community Impact Plan expenditures from 2022 through 2025 in order to match such expenditures in the appropriate accounting period for rate-making purposes; and
 - b. Defer recognition of commodity expenditures for the year ending December 31, 2022, for an amount in that net income equals to at least \$1 million, as a regulatory asset in order to match such expenditures in the appropriate accounting period for rate-making purposes.

Policy Committee 11/16. (Jennifer Davidson)

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Discussion Items:

14. Discuss, with possible action, **Election of Officers for 2023** (President and Vice President) for the SMUD Board of Directors. **Policy Committee 11/16. (President Rose)**

Presenter: President Rose

Informational Items:

15. Provide the Board with SMUD's financial results from the nine-month period ended September 30, 2022, and a summary of SMUD's current Power Supply Costs.

Presenter: Lisa Limcaco

16. Audit Reports: Quarterly Report on the Status of Recommendations as of September 30, 2022; Work Flow Integration; California Independent System Operator (CAISO) Settlement Quality Meter Data – SMUD; and California Independent System Operator (CAISO) Settlement Quality Meter Data – Community Choice Aggregators (CCA).

Presenter: Claire Rogers

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Public Comment:

17. Items not on the agenda.

Board and CEO Reports:

- 18. Directors' Reports.
- 19. President's Report.
- 20. CEO's Report.
 - a. Board Video

Summary of Board Direction

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ANNOUNCEMENT OF CLOSED SESSION AGENDA

1. Public Employment.

Pursuant to Section 54957 of the Government Code:

CEO and General Manager.

* * * * *

Board Committee Meetings and Special 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 accordance with findings made by the Board pursuant to Government Code section 54953(e), these meetings will be held virtually (online).

November 15, 2022	Finance and Audit Committee and Special SMUD Board of Directors Meeting	Virtual Meeting (online)	5:30 p.m.
November 16, 2022	Policy Committee and Special SMUD Board of Directors Meeting	Virtual Meeting (online)	5:30 p.m.
November 29, 2022	Strategic Development Committee and Special SMUD Board of Directors Meeting	Virtual Meeting (online)	5:30 p.m.
November 30, 2022	Policy Committee and Special SMUD Board of Directors Meeting	Virtual Meeting (online)	5:30 p.m.
December 6, 2022	Finance and Audit Committee and Special SMUD Board of Directors Meeting	Virtual Meeting (online)	5:30 p.m.
December 7, 2022	Energy Resources & Customer Services Committee and Special SMUD Board of Directors Meeting	Virtual Meeting (online)	5:30 p.m.

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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 accordance with findings made by the Board pursuant to Government Code section 54953(e), these meeting will be held virtually (online).

December 8, 2022

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 his 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.

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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 October 16, 2022, through November 15, 2022.

Sacramento, California

October 12, 2022

The Board of Directors of the Sacramento Municipal Utility District met in special session concurrently with the Board Policy Committee via virtual meeting (online) at 5:30 p.m.

Roll Call:

Presiding: Dave Tamayo,
Chair of the Policy Committee

Present: Directors Rose (5:34 p.m.), Bui-Thompson and Herber

Absent: Directors Fishman, Kerth, and Sanborn

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

General Counsel Lewis stated that there was not a quorum for the Committee and noted the Chair may appoint any of the other Board members to sit on the Committee.

Chair Tamayo appointed Director Herber to serve on the Committee.

Committee Chair Tamayo turned to Discussion Calendar Item 1, to make findings pursuant to Government Code section 54953(e) to continue holding meetings virtually during proclaimed state of emergency (recurring item, every 30 days). He asked General Counsel Lewis to provide a brief explanation of the item.

General Counsel Lewis requested to move the item to later in the agenda due to the absence of a quorum of the Board at the present time.

Committee Chair Tamayo then turned to Agenda Item 2, accept the monitoring report for Strategic Direction SD-6, Safety Leadership.

Ellias van Ekelenburg, Director of Environmental, Safety & Real Estate Services gave a presentation on Agenda Item 2. A copy of the slides used in his presentation is attached to these minutes.

President Rose joined the meeting at 5:34 p.m.

No public comment was received for Agenda Item 2.

This item was placed on the Consent Calendar for the October 20, 2022, Board of Directors meeting.

Committee Chair stated that a quorum of the Board was present and addressed Discussion Calendar Item 1, to make findings pursuant to Government Code section 54953(e) to continue holding meetings virtually during proclaimed state of emergency (recurring item, every 30 days). He stated General Counsel Lewis would provide some brief comments on the item.

General Counsel Lewis stated the law allows special districts to conduct remote meetings with modified Brown Act requirements during a proclaimed state of emergency. She stated this item recurs every 30 days, and staff recommended the Board continue to make the findings, despite Sacramento County being in the low tier, due to such factors as low adoption of booster shots, SMUD continues to see cases in the workplace and community, and the possibility of a surge in the fall as had happened in the previous two years. She noted that making the findings would allow flexibility to continue to conduct meetings virtually, and the Board would need to take a vote as well as place on the consent calendar for the regular Board meeting due to the 30 days running before the next scheduled Committee meeting.

No public comment was received for Discussion Calendar Item 1.

After some discussion, Director Herber moved to approve Discussion Calendar Item 1, President Rose seconded, and Resolution No. 22-10-01 was approved by a vote of 4-0, with Directors Fishman, Kerth, and Sanborn absent.

RESOLUTION NO. 22-10-01

WHEREAS, SMUD is committed to preserving public access and participation in meetings of the Board of Directors and to the safety of meeting attendees; and

WHEREAS, all meetings of the Board of Directors are open and public, as required by the Ralph M. Brown Act (Gov't Code, §§ 54950-54963) ("Brown Act"), so that any member of the public may attend, participate in, and watch SMUD's governing body conduct its business; and

WHEREAS, the newly enacted Government Code section 54953(e) authorizes a local agency's governing body, during a proclaimed state of emergency, to participate in its public meetings using remote teleconferencing without compliance with the requirements of Government Code section 54953(b)(3), under specified conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, another condition is that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body determines that meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, on February 28, 2022, the California Department of Public Health rescinded the mask requirement effective March 1, 2022, for all individuals regardless of vaccination status and instead issued a strong recommendation that all persons, regardless of vaccine status, continue indoor masking; and

WHEREAS, the Sacramento County Department of Public Health on its Epidemiology COVID-19 Dashboard continues to show elevated case and death data that appears to have been stable for weeks, and this is supported by ongoing wastewater sampling; and

WHEREAS, Sacramento County and surrounding counties currently have low community transmission rates for COVID-19 as defined by the Centers for Disease Control and Prevention; and

WHEREAS, on April 21, 2022, the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) re-adopted its workplace COVID-19 Emergency Temporary Standards (ETS), as modified, effective May 6, 2022, through December 31, 2022, including outbreak reporting; and

WHEREAS, SMUD staff and other community members are still reporting infections with lasting symptoms; and

WHEREAS, adoption of the new bivalent booster is still relatively low; and

WHEREAS, SMUD Board and Committee meetings can last as long as four hours, with participants sitting in the same room sharing air the entire time; and

WHEREAS, it would be impractical for SMUD to take steps necessary to prevent imminent risks to the health and safety of attendees, such as by holding public meetings outdoors, ensuring public meeting attendees are vaccinated, have appropriate face coverings, and wear them consistent with public health guidance; and

WHEREAS, all meetings, agendas, meeting dates, times, and manner in which the public may participate in the public meetings of the SMUD Board and offer public comment by telephone or internet-based service options including video conference are posted on the SMUD website and physically outside of SMUD's Headquarters Building; and

WHEREAS, by Resolution No. 21-10-01 adopted on October 12, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-10-03 adopted on October 21, 2021, this Board made findings that requisite conditions exist for the SMUD

Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-11-05 adopted on November 18, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-12-04 adopted on December 9, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-03-01 adopted on March 8, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-03-03 adopted on March 17, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-04-01 adopted on April 13, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-04-03 adopted on April 21, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-05-06 adopted on May 19, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-06-02 adopted on June 16, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-07-02 adopted on July 21, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-08-05 adopted on August 18, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-09-06 adopted on September 15, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; **NOW, THEREFORE,**

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

Section 1. Risks to Health and Safety of Attendees. The Board has reconsidered the circumstances of the state of emergency and hereby finds that the state of emergency continues to directly impact the ability of the members to meet safely in person and holding SMUD Board meetings in person would present imminent risks to the health and safety of attendees.

Section 2. Remote Teleconference Meetings. SMUD staff are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution, including conducting open and public meetings in accordance with section 54953(e) and other applicable provisions of the Brown Act.

Section 3. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) November 11, 2022, or (ii) such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3)

to extend the time during which the SMUD Board may continue to teleconference
without compliance with paragraph (3) of subdivision (b) of section 54953.

Approved: October 12, 2022

INTRODUCED: DIRECTOR HERBER				
SECONDED: DIRECTOR ROSE				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN				X
HERBER	X			
KERTH				X
TAMAYO	X			
SANBORN				X

Item #1 was also placed on the Consent Calendar for the October 20, 2022, Board of Directors meeting.

Committee Chair Tamayo then turned to Agenda Item 3, accept the monitoring report for Strategic Direction SD-10, Innovation.

Ed Hamzawi, Director of Advanced Energy Solutions, gave a presentation on Agenda Item 3. A copy of the slides used in his presentation is attached to these minutes.

No public comment was received for Agenda Item 3.

This item was placed on the Consent Calendar for the October 20, 2022, Board of Directors meeting.

President Rose departed the meeting at 6:48 p.m.

Committee Chair Tamayo then turned to Agenda Item 4, accept the monitoring report for Strategic Direction SD-19, Diversified Business.

Rachel Huang, Director of Customer & Grid Strategy, gave a presentation on Agenda Item 4. A copy of the slides used in her presentation is attached to these minutes.

No public comment was received for Agenda Item 4.

This item was placed on the Consent Calendar for the October 20, 2022, Board of Directors meeting.

Committee Chair Tamayo then turned to Agenda Item 5, Board Monitoring: Board-Staff Linkage BL-6, Evaluating the Chief Executive Officer and General Manager's Performance and Board-Staff Linkage BL-7, Delegation to the Chief Executive Officer and General Manager.

Committee Chair Tamayo provided a presentation on Agenda Item 5, which incorporated responses to surveys previously circulated to the Board regarding the policies. A copy of the slides used in his presentation is attached to these minutes.

No public comment was received for Agenda Item 5.

Committee Chair Tamayo then turned to Agenda Item 6, Board Work Plan.

Committee Chair Tamayo noted that President Rose and Vice President Sanborn were not available and briefly displayed the presentation on the Board Work Plan. A copy of the slides is attached to these minutes.

No public comment was received for Agenda Item 6.

Committee Chair Tamayo then turned to Agenda Item 7, statements from the public regarding items not on the agenda, but none were forthcoming. He stated that written comments received on 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 comments were received for Agenda Item 7.

Committee Chair Tamayo requested the Summary of Committee Direction, but there were no items.

No further business appearing, Committee Chair Tamayo adjourned the meeting at 7:04 p.m.

Approved:

Committee Chair

Secretary

Exhibit to Agenda Item # 2

Accept the monitoring report for **Strategic Direction SD-6, Safety Leadership.**

Board Policy Committee and Special SMUD Board of Directors Meeting
October 12, 2022, scheduled to begin at 5:30 p.m.
Virtual Meeting (online)

Strategic Directive (SD)-6, Safety Leadership

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

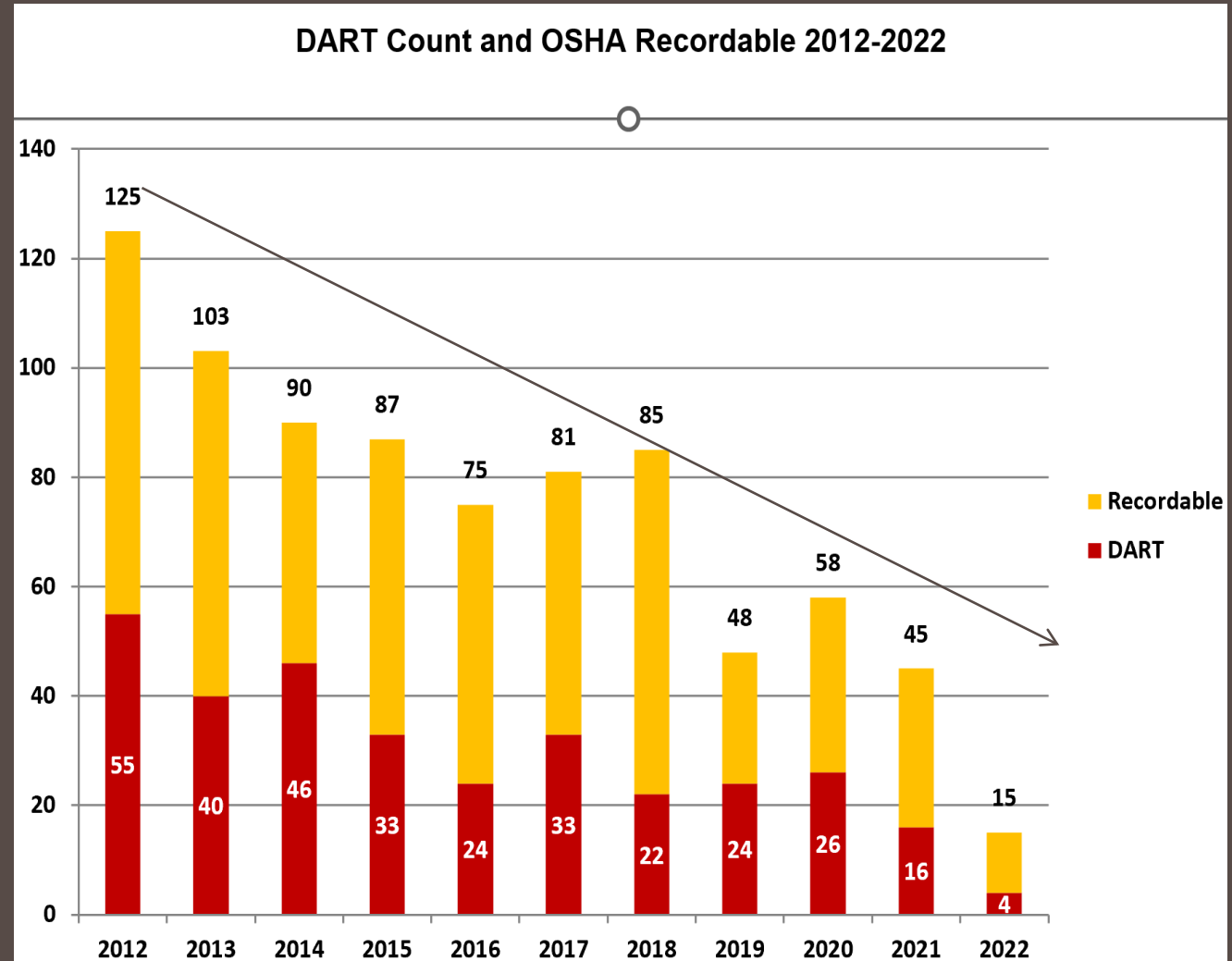
- a) Support contractors to reduce and eliminate potential hazards for Serious Injuries and/or Fatality (SIF) when conducting high risk work.

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.

Workplace Safety 2022

- Days Away Restricted Time (DART)
Board Limit by 2025 = 13
- 2022 thru Q2 = 4 Days Away Restricted Time (DART)
- 2022 thru Q2 = 15 OSHA Recordables
- Ongoing Improvements due to: Safety for Life Culture, increased near miss reporting, accident/incident investigation, supervisor/employee interactions, management & employee engagement, behavior-based safety, and wellness.



Quality Care

Quality care of injured employees is measured through the Workers' Compensation program's performance, which is assessed annually by an independent actuary.

	2018	2019	2020	2021	2022
No. of Claims (Medical & Indemnity)	120	85	88	59	54*
Incident rate per 100 employees	5.06	3.6	2.3	2.4	2.2*
Rates per \$100 payroll	.98	.94	.94	.85	.67*

*** All metrics are at historic lows**

Contractor and Public Safety

Contractor Safety

- 73 SMUD Contractors currently in the ISN pilot
- Pre-qualification of contractors
- Safety Plan Review and Onboarding
- 96 Field Visits in Q1-Q2, 2022
- OSHA compliance oversight with projects
- Increased partnership, new metrics



Public Safety

- Billboard Campaign & Educational Outreach
- Expanded Vegetation Contractor Awareness
- Third-Party Contractor & Agricultural Worker PSA Program
- Drone Safety Awareness
- EMF meter loan program

Statistics:

- 150 Asset Collision Incidents
- 7 Electrical Contacts
- 45 Dig-ins



Safety for Life: 2022



Driver Safety

- Behind the wheel Defensive Driving
- Vehicle Rodeo - interactive
- New Trainers for SMITHs driving
- SMS digital vehicle inspections



Field Ergonomics

- Completed pilot program, expanded scope
- Weekly crew focused field support
- New training and awareness program



Safely Conducted Observations Reduce Common Hazards (SCORCH)

- 1,995 office interactions & 1,399 field visits
- Removal of 8 barriers to employee safety
- Hybrid staff ergonomic self assessments
- Rolled out digital observation tool for SMS



Near Miss Reporting

- 34 Near miss reports
- SMS software being used to capture events
- Continued use of TapRoot software for root cause analysis for serious incidents or near misses.



Supervisor-Employee Interactions

- 7,067 interactions
- Focus on field, contractors, hybrid staff
- New digital interactions using SMS



Safe Re-entry Planning

- LMS Training for Return to Work
- Continued safe entry progress
- Remote work ergonomic program expansion



Accident and Incident Investigation

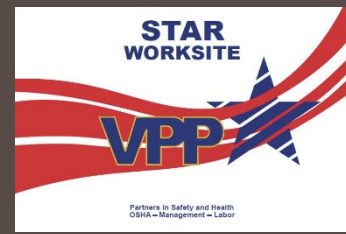
- Onboarding and field visit focus
- SMS Incident review and corrective action follow-up
- Contractor COVID-19 controls
- TapRoot refresher training completed



Safety for Life

- Monthly communications to all SMUD personnel with H&S related topics
- Continued Integration of safety at work and home messaging

Voluntary Protection Program (VPP)



- On March 2, 2022, SMUD Hydro employees received the highest Cal/OSHA recognition, the Voluntary Protection Program (VPP) Star certification.
- This certification recognizes employers and employees who demonstrate exemplary achievement in the prevention and control of workplace safety and health hazards.
- It is a partnership between Cal/OSHA, Labor and Management.
- Management commitment and employee participation are two key elements in VPP, and organizations who achieve VPP certification are considered leaders in the field of workplace health and safety.



Challenges

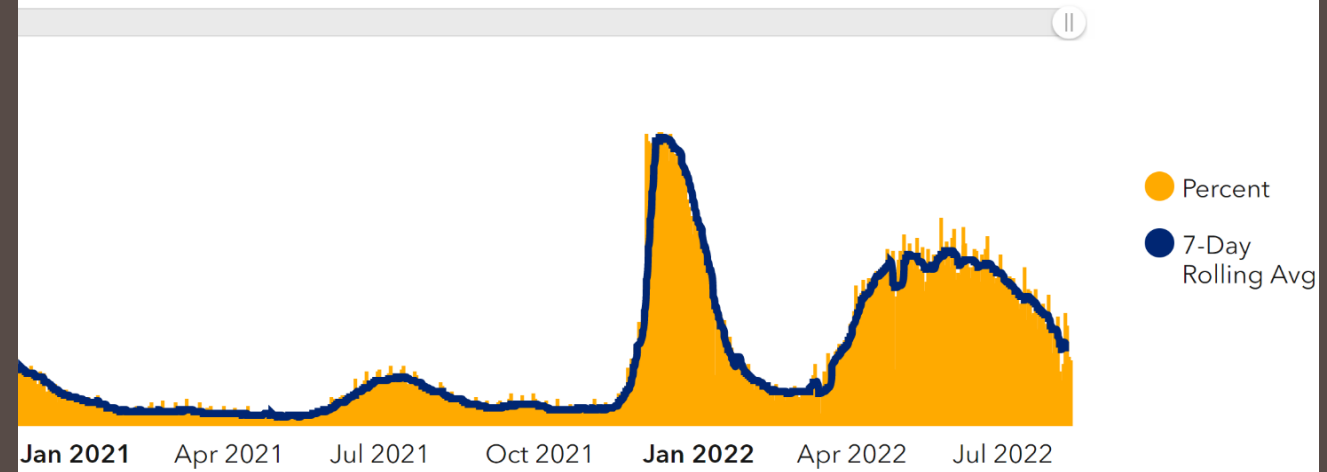
COVID-19

- Changes in orders (DPHS/Cal-OSHA)
- Communication updates and clarity
- Contact tracing & testing – new Axiom contract
- Re-entry & Engagement

Wildfire Smoke

- AQI Reporting & use of purple air
- Training and new in-cab air filters
- N-95 PPE usage
- Field Operational Impacts

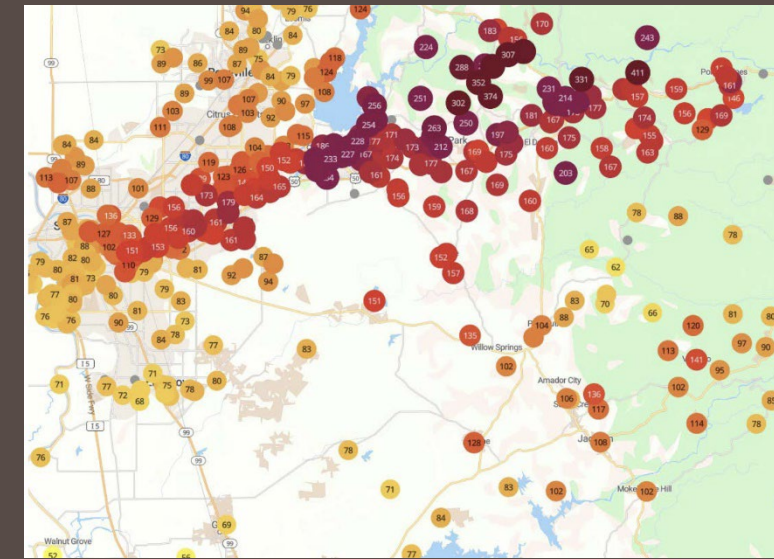
Daily Percent Positive



Sacramento



UARP



Requested Action

- Accept the Q1/Q2 2022 monitoring report for SD-6, Safety Leadership.
- Place item on the Board consent calendar for approval.

Exhibit to Agenda Item #3

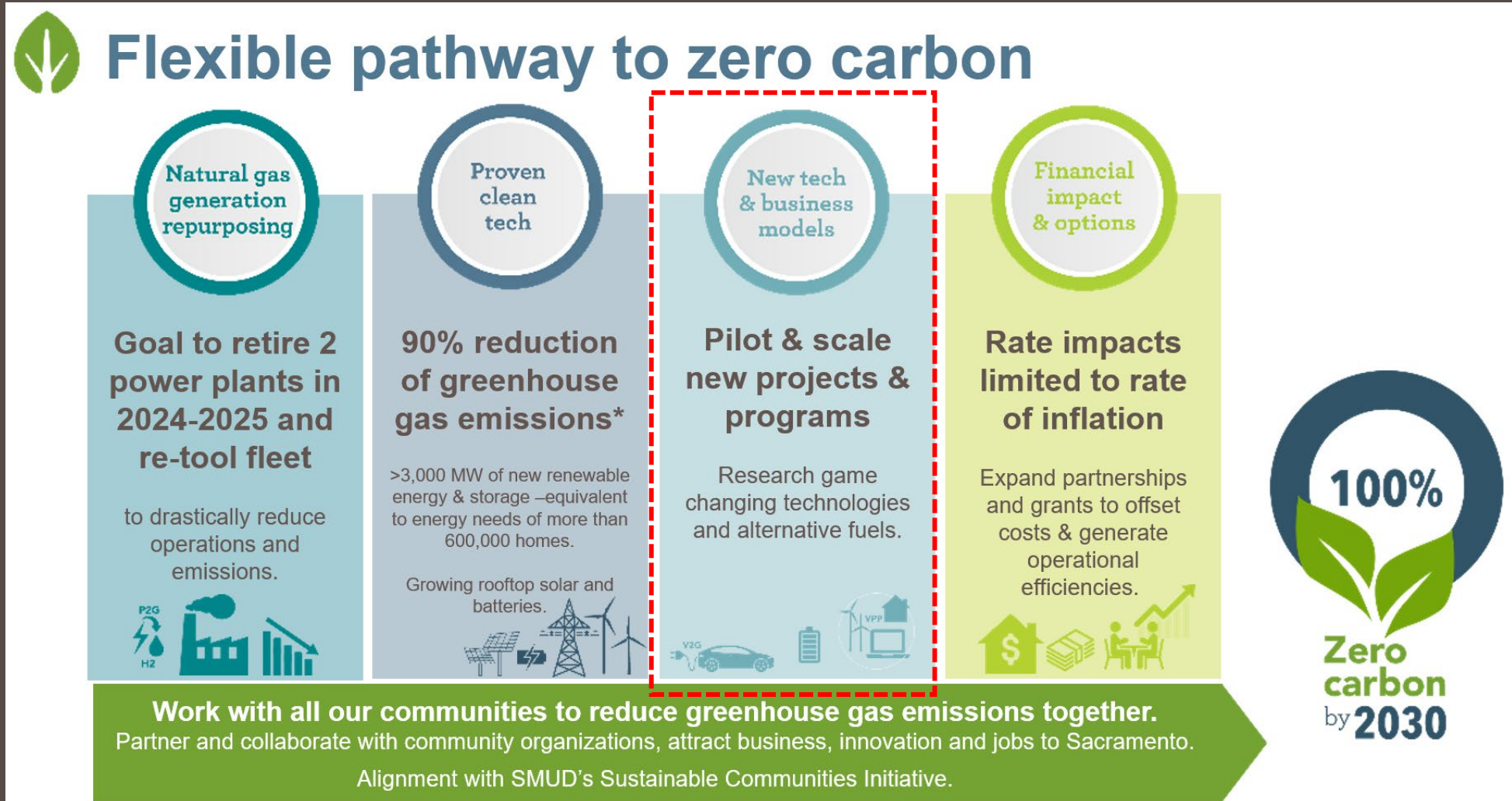
Accept the monitoring report for **Strategic Direction SD-10, Innovation.**

Board Policy Committee and Special SMUD Board of Directors Meeting
Wednesday, October 12, 2022, scheduled to begin at 5:30 p.m.
Virtual Meeting (online)

SD-10 Innovation

Delivering innovative solutions, products and services to our customers is a core value. To assure our long-term competitiveness, SMUD shall invest in research and development projects that support its core and key values, and integrate emerging technologies and new business models into SMUD's customer offerings in a way that balances risk and opportunity and benefits our customers and community.

Aligning to the Zero Carbon Plan



Innovation Project Portfolio

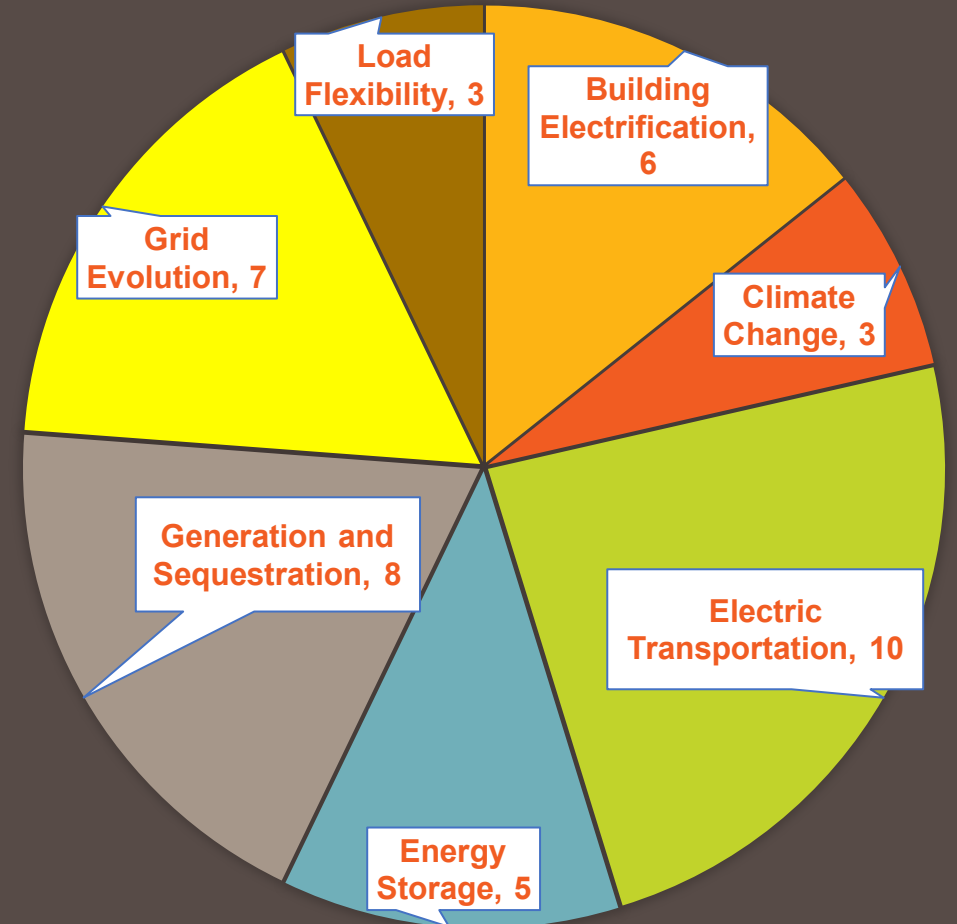
**New tech
& business
models**

**Pilot & scale
new projects &
programs**

Research game
changing technologies
and alternative fuels.



42 Projects since
September 2021



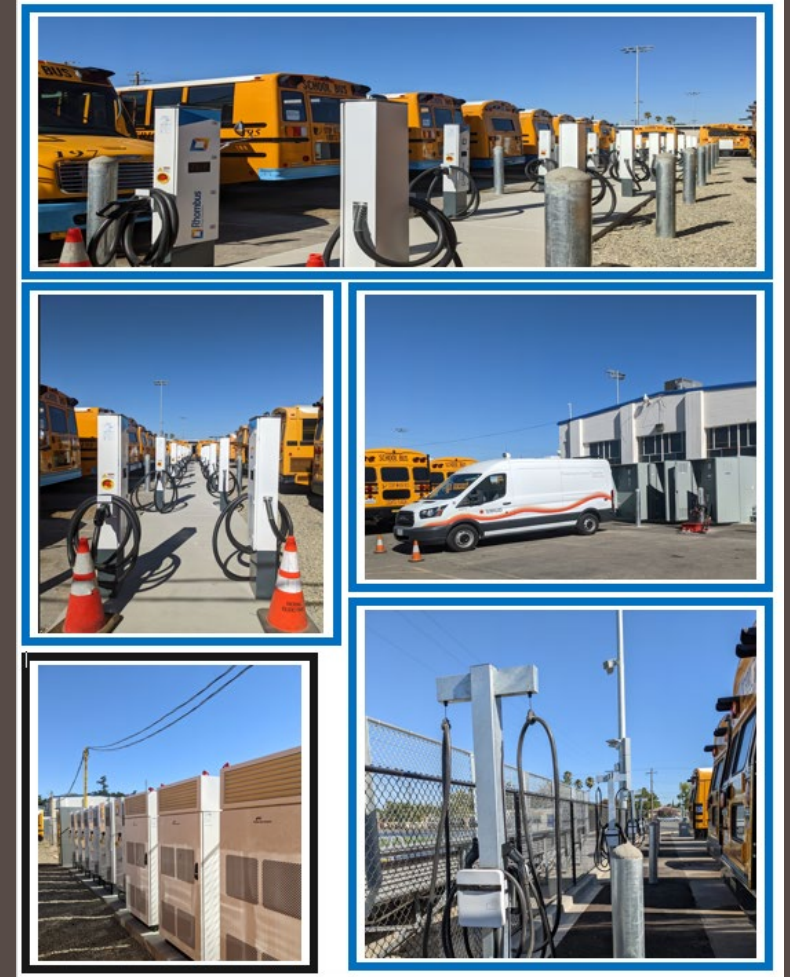
Electric Transportation

Support transportation electrification

Mitigate grid impacts

Evaluate EVs as a utility battery (V2G)

- Installed chargers for Twin Rivers USD project
- Launched Managed EV Charging project with Ford, GM, and BMW
- Ordered 5 Zeus Medium Duty EV Chassis trucks

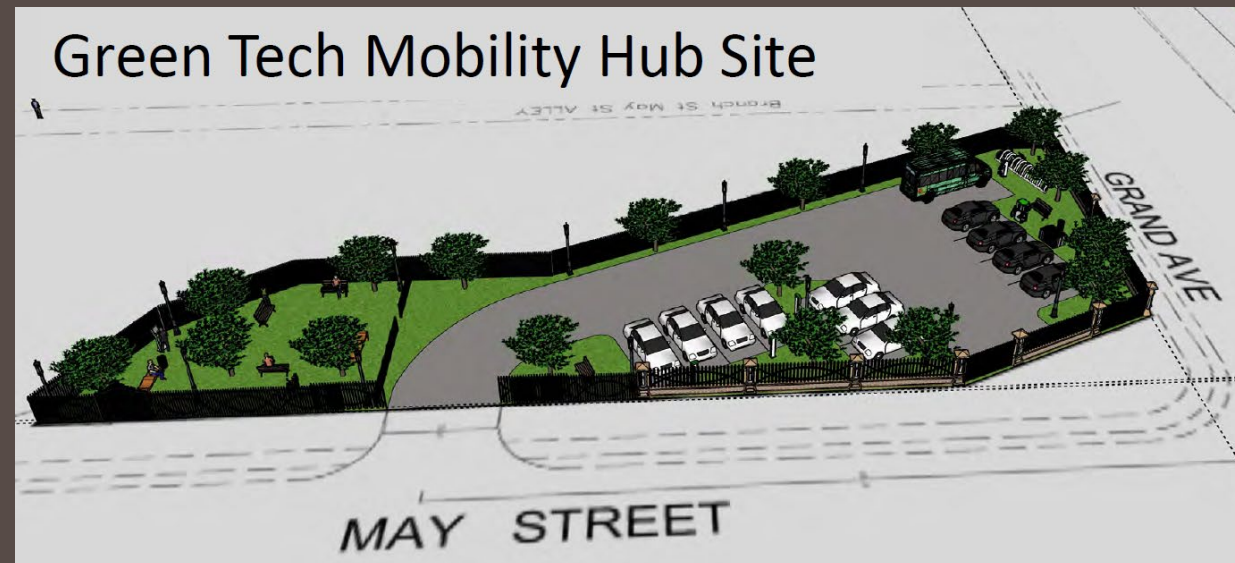


Electric Transportation

Support transportation electrification

Expand access

- Awarded \$2.2M CEC REACH Grant for ChargeReady Community project
 - Deploy 108 EV chargers at 6 multifamily properties selected by Mutual Housing California
- Completed site construction and paving for Del Paso Mobility Hub
 - Next steps are interconnection and charger installations.



Building Electrification & Load Flexibility

Mitigate grid and customer impacts	Customer engagement	DERs for load flexibility
<ul style="list-style-type: none">• Examining solutions for heat pump water heater technology and segment gaps<ul style="list-style-type: none">➤ 120V units and central system demonstrations• Aligning on nationwide utility & industry standards through the Advanced Water Heating Initiative• Evaluating impacts from the launch of My Energy Optimizer smart thermostat control program<ul style="list-style-type: none">➤ Engage beyond Time Of Day & events messaging• Partnering with UC Davis and Panasonic to pilot the EnergyKit home energy management system		



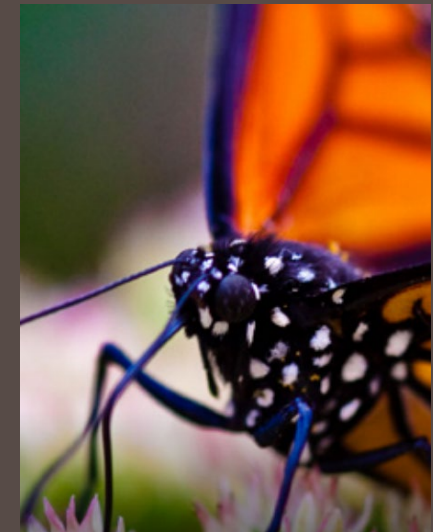
Energy Storage & Climate Change

Operationalize storage as a grid & economic resource

Energy Storage to address variability

Investigate climate adaptation

- Completed construction of SMUD's 4MW battery storage system at Hedge
- Conducted Long Duration Energy Storage assessment
 - Pursuing flow batteries - ESS partnership announcement
 - Secondary technology partner selection via upcoming RFI
- Implemented a generation site habitat partnership with UC Davis and EPRI
 - Introducing native plants & pollinators



Generation & Grid Evolution

Grid visibility & control of DERs

- Implemented advanced software solution for solar smart inverter interconnections
- Installed and began testing smart inverters for grid applications
- Completed analysis of alternative generation fuels
 - recommending Renewable Natural Gas and Hydrogen
- Partnering with DOE on hydrogen blending research
- Established a partnership connecting NorCal & SoCal efforts for joint pursuit of DOE hydrogen funding (ARCHES)
- Exploring projects for Carbon Capture & Sequestration

Alternative fuels

Biomass & carbon sequestration



Conclusion

Request the Board accept the SD-10 Monitoring Report.

Exhibit to Agenda Item #4

Accept the monitoring report for **Strategic Direction SD-19, Diversified Business.**

Board Policy Committee and Special SMUD Board of Directors Meeting
Wednesday, October 12, 2022, scheduled to begin at 5:30 p.m.
Virtual Meeting (online)

Three Revenue Portfolios

New Revenue Program	Innovation Generator Program	Legacy Revenue Programs
<ol style="list-style-type: none">1. Community Energy Services2. NEC/STI Partnership3. Sacramento Power Academy (SPA)4. Smart Grid Billing5. OSI ADMS/DERMS Co-Development6. GridX	<ol style="list-style-type: none">1. DER Planning Software2. Intelligent Energy Solutions	<ol style="list-style-type: none">1. Cell Site Construction2. Energy Profiler3. Home Power4. Moving Connections5. Power Protection

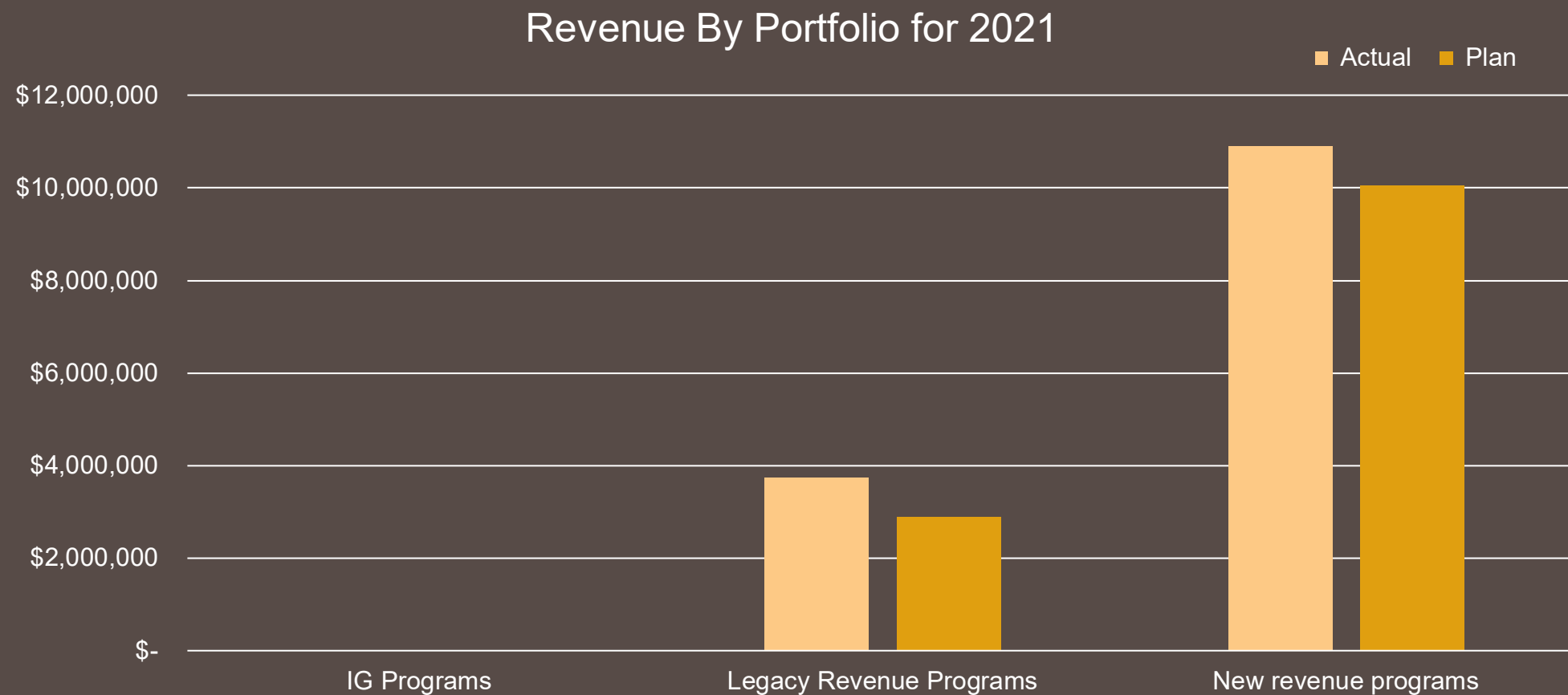
New Revenue Portfolio Risk still deemed low; no changes from 2018

2021 Highlights

- Launch of the California Mobility Center
- Completed Solar & Storage module for DER Planning Tool with Clean Power Research (CPR)
- Progress on ADMS/DERMS with OSI

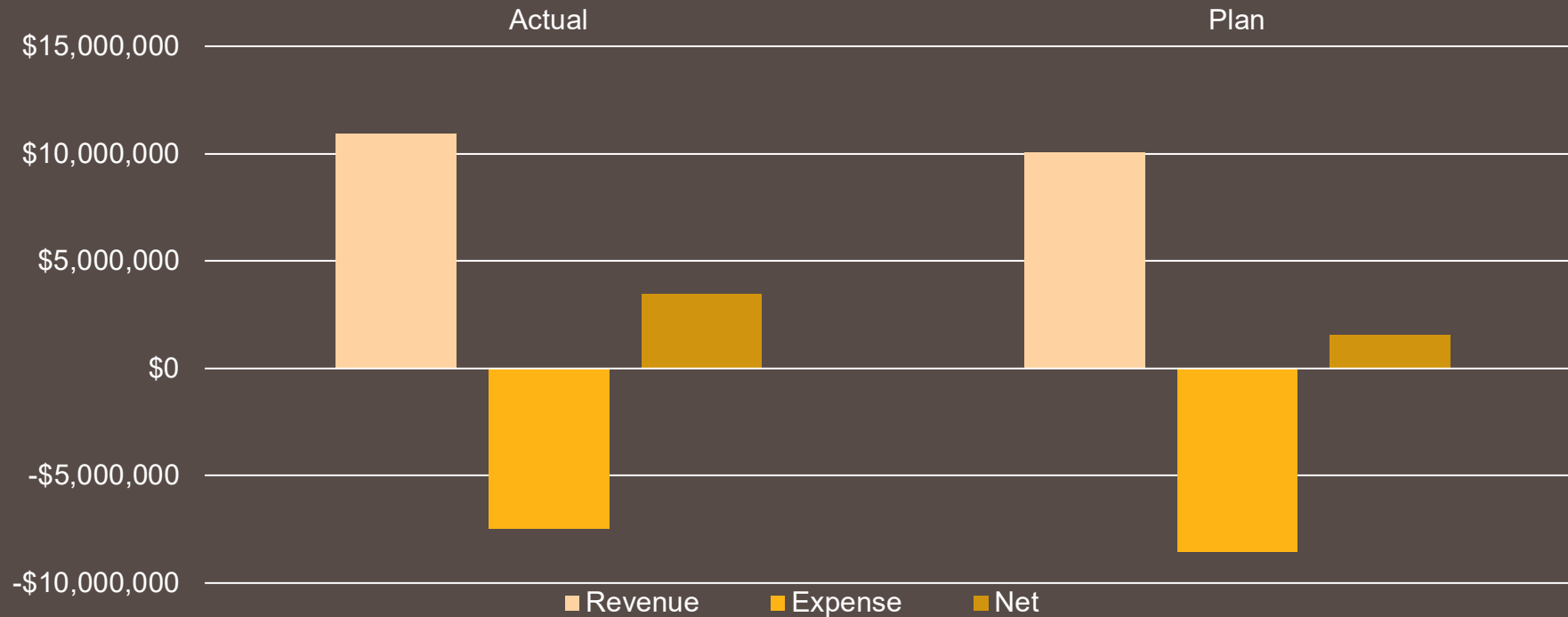


Revenue By Portfolios – 2021



New Revenue Program – 2021

2021 New Revenue Program Portfolio



- Portfolio generated \$3.4M net positive revenue in 2021 (compared to \$2M in 2020)

Looking Ahead

- Launch of Phase 1 for ADMS/DERMS with OSI
- Completion of additional modules on DER Planning Tool with CPR
- Signing of ESS contract
- New CCAs



Recommendation

- SMUD is in compliance with SD-19
- Recommend Board accept 2021 SD-19 Monitoring Report

Exhibit to Agenda Item #5

Board Monitoring: Board-Staff Linkage BL-6, Evaluating the Chief Executive Officer and General Manager's Performance and Board-Staff Linkage BL-7, Delegation to the Chief Executive Officer and General Manager.

Board Policy Committee and Special SMUD Board of Directors Meeting
Wednesday, October 12, 2022, scheduled to begin at 5:30 p.m.

Virtual Meeting (online)

BL-6 Evaluating the CEO/GM's Performance

The Chief Executive Officer and General Manager's job performance shall be evaluated by comparing the organization's results, operations and their personal performance to the policies established by the Board. Specifically: a) The Board shall evaluate the Chief Executive Officer and General Manager's performance on an annual basis in December. In the same month, the Chief Executive Officer and General Manager shall propose performance criteria for the following year that represent their reasonable interpretation of achieving the results defined by the Board.

Compliance Scores:

High 5

Med

Low

b) The evaluation will be based on a review of the organization's performance and the Chief Executive Officer and General Manager's personal performance against the performance criteria proposed under subsection a), as accepted by the Board.

c) Additional performance discussions and check-ins with the Chief Executive Officer and General Manager should occur at mid-year.

Compliance Scores:

High 5

Med

Low

d) The Board will use data to determine the degree to which Board policies are being met. e) All policies that instruct the Chief Executive Officer and General Manager shall be monitored at a frequency and by a method chosen by the Board.

Compliance Scores:

High 5

Med

Low

BL-7 Delegation to the CEO/GM

The Board will instruct the Chief Executive Officer and General Manager through written policies that define the results that the organization is to achieve, and which describe the delegation of authority to the Chief Executive Officer and General Manager.

Compliance Scores:

High 5

Med

Low

Specifically: a) The Board shall identify and define those results or conditions of SMUD that are acceptable and not acceptable to the Board and communicate them in the form of policy.

Compliance Scores:

High 5

Med

Low

b) The Board shall develop policies that define the delegation to the Chief Executive Officer and General Manager with regard to the Chief Executive Officer and General Manager's authority.

c) The Chief Executive Officer and General Manager is authorized to establish all further policies, make all decisions, take all actions, establish all practices, and develop all activities related to the operations or business affairs of SMUD.

Compliance Scores:

High 5

Med

Low

d) The Chief Executive Officer and General Manager shall use prudent judgment in the exercise of the delegations and in a manner that is operationally and economically sound, serves the best interests of SMUD's customers and the community, comports with prudent business practices, balances the risks and benefits of the actions, and does not expose SMUD to unreasonable risk. If the Chief Executive Officer and General Manager reasonably determines that an activity related to the delegations presents, regardless of the size of the financial commitment: (i) a unique and significant operational risk to SMUD; (ii) a significant impact to customers; (iii) a significant impact to community relations; (iv) a significant impact to SMUD's reputation; or (v) materially compromises the policies and goals established by the Board, the Chief Executive Officer and General Manager shall timely inform the Board and may request the Board to take appropriate actions.

Compliance Scores:

High 5

Med

Low

e) The Board may change its delegation to the Chief Executive Officer and General Manager at any time, subject to the conditions of the Board's contract with the Chief Executive Officer and General Manager, thereby expanding or limiting the authority of the Chief Executive Officer and General Manager. But as long as any particular delegation is in place, the Board will abide by the Chief Executive Officer and General Manager's decisions in those areas that are delegated to him or her.

Compliance Scores:

High 5

Med

Low

Exhibit to Agenda Item #6

Board Work Plan.

SMUD Board of Directors Meeting

Wednesday, October 12, 2022, scheduled to begin at 5:30 p.m.

Virtual Meeting (online)

Board Work Plan

18-Oct	FINANCE & AUDIT	Finance Statements and Power Supply Costs	L. Limcaco
	5:30pm	SD-13 Economic Development Monitoring Report	J. Bodipo-Memba, M. Webster
		SD-14 System Enhancement Monitoring Report	M. Veloso-Koenig
		2nd Quarter Procurement Report	C. Fallon
		Commodity Budget Augmentation	J. Restivo
		Contract Changes for Bulk Fuel and Cardlock Fuel	C. Fallon
		General Line Construction Work Contracts	A. Miszti
		UARP Wildfire Risk Mitigation Contracts	A. Miszti
		Medical Premium Renewals	L. Rodriguez
19-Oct	ERCS		
	5:30pm	PURPA Standards	S. Lins
		SD-7 Environmental Leadership Monitoring Report	E. Ekelenburg
		SD-9 Resource Planning Monitoring Report	B. Swann
20-Oct	BOARD		
	5:30pm		
	SFA MEETING	SFA Meeting to Follow the Board Meeting	

8-Nov	BUDGET		
	5:30pm		
9-Nov	BUDGET		
	5:30pm		
15-Nov	FINANCE & AUDIT	Finance Statements and Power Supply Costs	L. Limcaco
	5:30pm	Audit Questions	C. Rogers
		3rd Quarter Procurement Report	C. Fallon
		Budget Follow Up Questions	J. Davidson
		Defer Recognition of Pension and OPEB Expenses	L. Limcaco
		Deferred Revenue for Community Impact Strategy Expenses	L. Limcaco
	ERCS		
	to follow		
16-Nov	POLICY	Election of Officers for 2023	B. Rose
	5:30pm	SD-16 Info Management/Security Monitoring Report	A. Jacobs
		SD-17 Enterprise Risk Management Monitoring Report	R. Mills
		Work Plan	B. Rose
	CLOSED SESSION	Information Management and Security	
17-Nov	BOARD		
	5:30pm		
	CLOSED SESSION	CEO Compensation	

29-Nov	STRATEGIC	Grants/Regional Coordination	S. Lins / R. Huang /S. Johns
	5:30pm		
30-Nov	POLICY	Committee Membership and Chairs for 2023	Vice Pres 2023
	5:30pm	Annual Review of Standing Committees	B. Rose
		SD-11 Public Power Business Model Monitoring Report	Steve Lins
		Annual Legislative Update	E. Whitney
		Proposed Revisions to GP-12 Board Compensation & Benefits	L. Lewis
		Work Plan	B. Rose
6-Dec	FINANCE & AUDIT	Finance Statements and Power Supply Costs	L. Limcaco
	5:30pm	Audit Questions	C. Rogers
		2022 SMUD Financial Statements External Audit Plan	A. Worthman
6-Dec	CLOSED SESSION	Performance Evaluations	
7-Dec	ERCS		
	5:30pm		
8-Dec	BOARD	Budget Approval	
	5:30pm		

Parking Lot

Presentations:

Sacramento, California

October 20, 2022

The Board of Directors of the Sacramento Municipal Utility District met in regular session via virtual meeting (online) at 5:31 p.m.

Roll Call:

Presiding: President Rose

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

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

Vice President Sanborn shared the environmental tip.

President Rose called for approval of the agenda. Director Tamayo moved for approval of the agenda, Director Herber seconded, and the agenda was unanimously approved.

Director Bui-Thompson, Chair, presented the report on the Strategic Development Committee meeting held on October 11, 2022.

Director Tamayo, Chair, presented the report on the Policy Committee meeting held on October 12, 2022.

Director Herber, Chair, presented the report on the Finance and Audit Committee meeting held on October 18, 2022.

Director Fishman, Chair, presented the report on the Energy Resources & Customer Services Committee meeting held on October 19, 2022.

President Rose then called for public comment for items on the agenda.

Public comment was received, a copy of which is attached to these minutes, from the following member of the public:

- Derek Cressman

President Rose then addressed the consent calendar consisting of Items 3 and 18. Director Fishman moved for approval of the consent calendar,

Director Kerth seconded, and Resolution Nos. 22-10-02 through 22-10-17 were unanimously approved.

RESOLUTION NO. 22-10-02

**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 October 16, 2022, through November 15, 2022.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

RESOLUTION NO. 22-10-03

WHEREAS, SMUD is committed to preserving public access and participation in meetings of the Board of Directors and to the safety of meeting attendees; and

WHEREAS, all meetings of the Board of Directors are open and public, as required by the Ralph M. Brown Act (Gov't Code, §§ 54950-54963) ("Brown Act"), so that any member of the public may attend, participate in, and watch SMUD's governing body conduct its business; and

WHEREAS, the newly enacted Government Code section 54953(e) authorizes a local agency's governing body, during a proclaimed state of emergency, to participate in its public meetings using remote teleconferencing without compliance with the requirements of Government Code section 54953(b)(3), under specified conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, another condition is that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body determines that meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, on February 28, 2022, the California Department of Public Health rescinded the mask requirement effective March 1, 2022, for all individuals regardless of vaccination status and instead issued a strong recommendation that all persons, regardless of vaccine status, continue indoor masking; and

WHEREAS, the Sacramento County Department of Public Health on its Epidemiology COVID-19 Dashboard continues to show elevated case and death data that appears to have been stable for weeks, and this is supported by ongoing wastewater sampling; and

WHEREAS, Sacramento County and surrounding counties currently have low community transmission rates for COVID-19 as defined by the Centers for Disease Control and Prevention; and

WHEREAS, on April 21, 2022, the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) re-adopted its workplace COVID-19 Emergency Temporary Standards (ETS), as modified, effective May 6, 2022, through December 31, 2022, including outbreak reporting; and

WHEREAS, SMUD staff and other community members are still reporting infections with lasting symptoms; and

WHEREAS, adoption of the new bivalent booster is still relatively low; and

WHEREAS, SMUD Board and Committee meetings can last as long as four hours, with participants sitting in the same room sharing air the entire time; and

WHEREAS, it would be impractical for SMUD to take steps necessary to prevent imminent risks to the health and safety of attendees, such as by holding public meetings outdoors, ensuring public meeting attendees are vaccinated, have appropriate face coverings, and wear them consistent with public health guidance; and

WHEREAS, all meetings, agendas, meeting dates, times, and manner in which the public may participate in the public meetings of the SMUD Board and offer public comment by telephone or internet-based service options including video conference are posted on the SMUD website and physically outside of SMUD's Headquarters Building; and

WHEREAS, by Resolution No. 21-10-01 adopted on October 12, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-10-03 adopted on October 21, 2021, this Board made findings that requisite conditions exist for the SMUD

Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-11-05 adopted on November 18, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-12-04 adopted on December 9, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-03-01 adopted on March 8, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-03-03 adopted on March 17, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-04-01 adopted on April 13, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-04-03 adopted on April 21, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-05-06 adopted on May 19, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-06-02 adopted on June 16, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-07-02 adopted on July 21, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-08-05 adopted on August 18, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-09-06 adopted on September 15, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-10-01 adopted on October 12, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; **NOW, THEREFORE**,

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

Section 1. Risks to Health and Safety of Attendees. The Board has reconsidered the circumstances of the state of emergency and hereby finds that the state of emergency continues to directly impact the ability of the members to meet safely in person and holding SMUD Board meetings in person would present imminent risks to the health and safety of attendees.

Section 2. Remote Teleconference Meetings. SMUD staff are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution, including conducting open and public meetings in accordance with section 54953(e) and other applicable provisions of the Brown Act.

Section 3. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) November 19, 2022, or (ii) such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the SMUD Board may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

RESOLUTION NO. 22-10-04

**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 Leadership**, substantially in the form set forth in **Attachment A** hereto and made a part hereof.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: September 28, 2022

FROM: Claire Rogers *CR 9/28/22*

SUBJECT: Audit Report No. 28007434
Board Monitoring Report; SD-06, Safety Leadership

Audit and Quality Services (AQS) received the SD-06 *Safety Leadership* first-half 2022 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

Strategic Direction SD-6, Safety Leadership states that:

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.

2. Executive Summary

SMUD is in compliance with the SD-6 direction and is in alignment with SMUD's new 5-year strategy of working toward a zero-incident culture. SMUD is currently on track to meet safety performance targets related to SD-6 for 2022.

Workplace Safety

From January 2022 through June, SMUD recorded 15 OSHA Recordables injuries. This is a 40% decrease from this time last year (25 OSHA Recordables). Of the 15 injuries, 4 (2 Lost Time & 2 Modified Duty injuries) resulted in a .039 DART rate. This represents a continued decrease in injuries which is trending downward to meet our 2025 Target (See Appendix A).

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.

	2018	2019	2020	2021	2022
No. of Claims (Medical & Indemnity)	120	85	89	59	54
Incident rate per 100 employees	5.06	3.6	2.3	2.4	2.2
Rates per \$100 payroll	.98	.94	.94	.85	.67

This year has continued to present challenges with COVID-19. COVID -19 has not only impacted the way SMUD is getting work done but has also resulted in new and emerging legislation surrounding paid leave and workers' compensation liabilities for COVID related injuries. Despite these challenges SMUD's program remains strong and continues to lead when compared with similarly situated organizations. No COVID-19 claims were made in 2022.

Contractor Safety

Safety has completed 96 contractor site safety field visits thru the 2nd Quarter of 2022. These visits focus on high hazard work performed on SMUD projects focusing on construction safety hazards, such as excavation, working at elevations, and in confined spaces to verify safe working practices by our contractor to reduce the potential for serious injuries or property damage. Contractor reported incidents require an investigation to be completed and typically will warrant additional site safety visits to verify corrective measures have been put into place to reduce further occurrences.

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 the first half of 2022, there have been 150 incidents where the public struck a SMUD asset with a vehicle, with one fatality from such events. Seven electrical contacts were reported with one minor injury, and 45 dig-ins with no reported injuries.

3. Additional Supporting Information

The new SD-6 Safety Direction became effective February 2021. Our goal is to achieve the desired performance objectives by year-end 2025. This report summarizes the first half of the 2022 safety performance.

Safety Leadership. The Safety Team continues with its integration efforts to support Executive Leadership's 5-year plan that emphasizes 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 Safety Road Map, which was updated in early 2022.

Safety Management System (SMS). Five applications within the Safety Management System are planned to be activated in 2022. They include the Contractor Manager, Safety Data Sheets (SDS), Industrial Hygiene, Initial Injury Reports and Incident & Measurements which will replace core functions of the legacy Safety Incident Tracking System (SITS). During 2022, Safety anticipates that there will be sufficient data to activate and utilize, new safety dashboards and reports for leadership.

Safety Standards Development. The Safety Team has continued their efforts to improve the process of routing new or updated Health & Safety Standards to appropriate Directors for review, utilizing the SMS "Doc Manager" application. The first standard to be routed, utilizing this process is the PCB Health & Safety Standard. In addition, the Team has been preparing for updates from Cal/OSHA on the COVID-19 requirements, to ensure our Injury Illness Prevention Program (IIPP) and COVID-19 Appendix contains the most up-to-date regulatory requirements and is provided to all SMUD personnel in a timely manner.

Supervisor-Employee Interactions. Safety continues to strengthen its supervisor-employee interaction quality program. Improvements included moving data to the new Safety Management System (SMS). 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. During the first half of 2022, a total of 7,067 Supervisor-Employee interactions were complete that resulted in a 152% percentage observed.

Near Miss Reporting. Leadership continues to support and encourage near miss reporting. During the first half of 2022, the Safety Incident Tracking System (SITS) and applications within the new Safety Management System, provided a method to track near miss reporting. The goal of this process is to identify opportunities for learning, prior to an incident occurring. Thirty-four near miss incident were reported through June 2022, 22 through the SITS applications and 12 in the new Safety Management System.

Contractor Safety. SMUD continues to use the ISNetwork system to evaluate our contractor's safety record and safety program. The Contractor Safety program focuses on SMUD contractors in Power Generation, Environmental Services, Line, Substation, and Vegetation management contractors that perform high risk work, such as high voltage work, working at heights, vegetation management, confined spaces, excavations, etc. Additionally, we have begun to integrate the use of the SMS system for use with SMUD contractors, primarily for incident tracking, reporting and investigations as we move away from SITS.

SMUD currently has 80 contractors in the ISN system. During the past year we have expended our site safety evaluations performed on our high-risk contractors validate safety performance on the jobsites. Through the second quarter of 2022, 96 site safety evaluations have been completed and SMUD is on track to meet or exceed the 2022 target of 150 evaluations. We are also continuing to validate our pre-qualification criteria for contractor selection. SMUD's pre-qualification criteria focuses on Contractor Fatality History, OSHA Citation History, DART and

Total Recordable Incident Rates (TRIR), Insurance Experience Ratio, Safety Culture Questions, and Safety Program Review.

In addition, SMUD Procurement and Safety have partnered together working on enhancing contract language as it relates to contractor safety requirements, Request for Proposal (RFP) templates for high-risk work and incorporating contractor safety as part of the onboarding process.

Safely Conducted Observations Reduce Common Hazards (SCORCH). A SCORCH Spring Cleaning event and Summer Safety photo contest were conducted to continuously promote SMUD's Safety for Life culture and intentionally expand employee use of the (SMS) Safety Management System. Employees positively responded to engagement opportunities that allow them to share photos of themselves and/or family members demonstrating safe behaviors in action *at home* and *at play*. Feedback obtained from these observations will be used to create an additional CBI behavior checklist that extends beyond the employee's core work. SCORCH relaunched its external process engagement efforts and best practices information gathering by attending Dekra's, Safety in Action conference after a two-year absence. An internal mini conference will serve as the forum for sharing the information and made available for all employees to attend. The goal is to elevate behavior awareness and wellness ownership to a level that is in alignment with a sustained work/life balance here at SMUD.

Through June of 2022, SCORCH team members conducted 1,995 Office and Professional observations and 1,399 Field employee observations. These safety interactions resulted in the removal of 2 barriers to employee safety. **Head & Neck Posture** is the current/trending top at-risk behavior for office employees. Early awareness and behavior ownership coaching for avoiding repeated or sustained awkward postures (chin to chest, chin to sky or craning) of the head and neck was out into action.

For Field employees **Situational Awareness** is the top trending at-risk behavior. This led to an action plan focused on elevating behavior awareness for more frequently updated information for potential moving and/or changing conditions related to the surrounding work area. Early recognition for a potential hazard (vehicle, pedestrians, or stray dogs) can provide employees the space, visibility, and time to safely react to a situation.

4. Challenges

COVID-19 and Vaccination Guidance. The safety of our employees is of utmost importance, so we continue to monitor SMUD COVID-19 cases and manage prevention efforts. In 2022 SMUD Safety, People, Services, & Strategies, along with Communications revised the COVID-19 guidance to meet regulation changes within the Cal-OSHA Emergency Temporary Standard around facial covering, testing programs, quarantine, and isolation guidelines to protect employees, contractors, and the public. SMUD continues to provide employees with COVID-19 vaccinations and antigen testing at our EC-OC clinic, as well as PCR testing at our contractor facility. Our third-party vendor Axiom Medical continues to handle employee contract tracing and the process has been working well.

Data Management. SMUD Safety and IT selected the GenSuite Safety Management System (SMS) to improve the quality, automation, and use of safety data. Injury dashboards and

automated reports will be available to leadership in the second half of 2022, with the rollout of the Incidents & Measurements application.

Chronic Muscular Injuries. The SMUD Safety Team continues to work with business units to a reduce all incidents. This year, the following actions were taken to focus on a reduction to chronic muscular injuries: SMUD leadership and employees worked together to continue to build trust. Safety continued to partner with SCORCH (behavior-based) Committees to utilize data from home observations and what at-risks were trending. Safety then used this data for areas to focus on during ergo evaluations and quarterly safety meeting topics.

Safety for Life efforts continued with Sparky's Crew sending quarterly safety newsletters, postcards, birthday cards and reaching out for children's artwork for the Safety Calendar.

Safety continued crew and contractor safety field visits, getting eyes on work and ensuring our employees, contractors, customers and community are safe. The Safety team has made additional updates to safety standards and trainings both in person and virtual. In addition, SMUD continued the field ergonomic program with Power Generation and started a pilot Injury Prevention Outpost with Line Division, at the end of the Q4 2021.

Wildfire Smoke. This year, in May and June, Safety held several Tabletop Exercises with our various leadership teams who have outdoor workers, to prepare for the use of the Purple Air monitoring system and reporting, in cab vehicle air filters, PPE, scheduling, and training as a different method to inform and assist with response of poor air quality days, should the need arise. We sent a voting email to all leadership to determine the need and interest of receiving Wildfire Smoke Alerts throughout the organization for these events. This year, to date, we have had 5 days of notifications, of which, were only provided to the UARP personnel due to the Oak and Electra Fires.

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. It is recommended that the Board accept the Monitoring Report for SD-6.

6. Appendices - Business Segment Safety Program Improvement Initiatives

Energy Delivery and Operations (EDO). Grid Assets leadership is continuing its efforts to achieve World Class Safety with ongoing efforts, of encouraging field staff input and participation in Business Unit and Work Group specific Joint Labor Management Safety Committees (JLMSCs), which include representatives from Field, Supervision, Union, Warehouse, Fleet and Safety in attendance. The Quarterly Business Segment JLMSC continues with an “All field teams’ approach” at SMUD, allowing for the sharing of ideas and mitigation controls, of similar risks. Due to COVID-19 impacts, these meetings continue to be held via Teams. A few of the subjects addressed this year which directly affect field staff have been SMS roll out of the Concern Report App, SCORCH Observation App, and Monthly Vehicle Inspections and Housekeeping Inspections in the Inspection Tool App; FR Clothing product substitution with like products (in response to global supply chain issues); procurement of a healthier electrolyte alternative and cooling hard hats for high heat in the summer months. Field crew response continues to be positive, for the safety improvements being made, recognized, and appreciated. During the first half of the year, Safety has partnered with ED&O field operations to roll out a highly effective, innovative field focused ergonomics program. Instead of having staff come in from the field to interact with the ergonomics specialist, the expert is going out to the job site. During this crew specific, 1-1 discussions various stretching techniques, ergo support tools are provided, and awkward postures are identified. This program started with the Line department and is quickly moving throughout the organization.

Safety has continued to work with the SMUD Power Academy, through the COVID pandemic, reviewing internal and external safety training programs, to ensure continued consistency and quality. This year, the SMUD Power Academy has been invited to participate and collaborate in the Health & Safety Standards update reviews, for input and identification of training opportunities.

The Safety Team continues to provide required health and safety training to field employees, utilizing smaller class sizes, updated signage, use of temperature stations, improved sanitization, PPE, and pre shift wellness checks. This adjustment to the safety training delivery has prevented any COVID related illnesses spread or outbreaks by the field crews during their participation in SMUD Safety training at the Power Academy, ECOC, Fresh Pond, or other SMUD reporting facility.

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. There were two employee shares this year in our Employee Safety for Life Newsletter. One newsletter was a personal share about how the wildfire smoke affected her and how she safely evacuated her home, and the other was a share about an employee’s son being bitten by a rattlesnake which offered information about myths and how to keep others safe. The Safety team hosted three driving rodeos this year for the Telecom, Meter Reading and Energy Specialist teams and has one more scheduled in fourth quarter for the Facilities teams. Safety for Life Sparky’s Crew for SMUD children consisting of birthday cards, safety newsletters, postcards, and the safety calendar with children’s artwork, has continued throughout the pandemic.

It is important to maintain health and wellness with the ever-changing landscape we are currently working through. Health & Safety realizes the environments in which we live, work and

play, impacts our well-being. The wellness program embraces a holistic approach that includes physical, financial, social, spiritual, and emotional wellness to support positive behavioral changes. Wellness activities were designed to support all employees, whether working on-site or remotely, through virtual wellness programs and activities. These activities focused on improving overall health, through on-line stretch breaks, workouts, nutritional seminars, and cooking demos, all to support physical health. In 2022, Health and Safety partnered with Wellness to establish guidelines to safely re-open locker rooms and showers to accommodate bike commuters and runners that have returned to campus. Earlier this year a new mental health workshops brought awareness to emotional health and provided tools and resources to support employees and their families. The new Mental Health Hotline was introduced for people dealing with a mental health crisis can now call the national hotline by dialing 988 for help. Health and Wellness efforts continue to focus on employees and their families, empowering them to promote and model positive attitudes and behaviors through a lifelong commitment to wellness.

Zero Carbon Energy Solutions (ZCES). Since the beginning of the COVID-19 pandemic, Power Generation has prioritized employee safety while ensuring that critical work is completed. The Upper American River Project (UARP) increased work planning efforts to isolate crews and document work routes in case contact tracing was needed. Gas Pipeline began reporting directly to the field, to limit employee to employee contact. Meetings that include JLMSC updates, 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 is utilized. 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. Multiple employees have been fit tested for N95 respirators, so they are able to respond to emergency call-outs.

In February 2022, Hydro Operations received the highest Cal/OSHA recognition, VPP Star status. VPP is designed to recognize employers and their employees who have implemented safety and health programs that effectively prevent and control occupational hazards. These programs go beyond minimal Cal/OSHA standards and provide the best feasible protection at the site. Achieving this status ensures that Hydro will continue with safety process improvements with annual comprehensive safety audits performed by a third party. Their 2022 audit will take place in September.

Management commitment and employee participation are key elements in achieving VPP recognition. VPP establishments are considered leaders in the field of workplace safety and health. GPO continues to meet and prepare for their Cal/OSHA audit.

Some of the major projects completed by Hydro employees include the Camino unit 1 generator maintenance consisting of rotor and stator cleaning and repair. Camino unit 1 and 2 breakers and switch gear were also replaced. In 2022, the Rubicon Reservoir flow meters and pipe were replaced all projects were high hazard work and were completed without injury or incident.

Customer & Community Services (CCS). Safety worked closely with CCS and Security to safely re-open the CSC lobby to full capacity. CCS initiated the dunning process that drove more customer into the lobby and all five customer windows were opened to support the increase of customer traffic. COVID-19 safety protocols remain in place to protect employees, contractors, and members of the public. The front lobby parking lot project is well underway for upgrades to meet ADA compliance and is scheduled for completion by Q4, 2022.

Corporate Financial and Administrative Services (CFAS). Facilities and Safety continue to partner on re-entry efforts and Home-Based Agent workspace installations to ensure ergonomic comfort for employees in office and at home. COVID-19 mitigation measures continue in the office workspace to protect all employees, contractors, and the public. Facilities has integrated Monthly Vehicle Inspections into SMS through the Inspection Tool application for easy access and data trending. Facilities continues to support the SMUD 2030 Zero Carbon goal by supporting the installation of EV Charging infrastructure throughout SMUD campuses as a united effort with SMUD contractors.

This summer, the Sacramento area has experienced record-breaking high temperatures throughout the region. Warehouse has partnered with Safety in heat-illness prevention mitigations to ensure all field employees have access to cool water, portable shade, and UV skin protection. During days with high heat hazards, Warehouse provides electrolyte-replenishing beverages to field employees. Safety and Warehouse have collaborated with various business units to pilot new hard-hats with advanced ventilation designs to improve the comfort of our field employees wearing mandatory personal protective equipment while performing essential work in high heat environments.

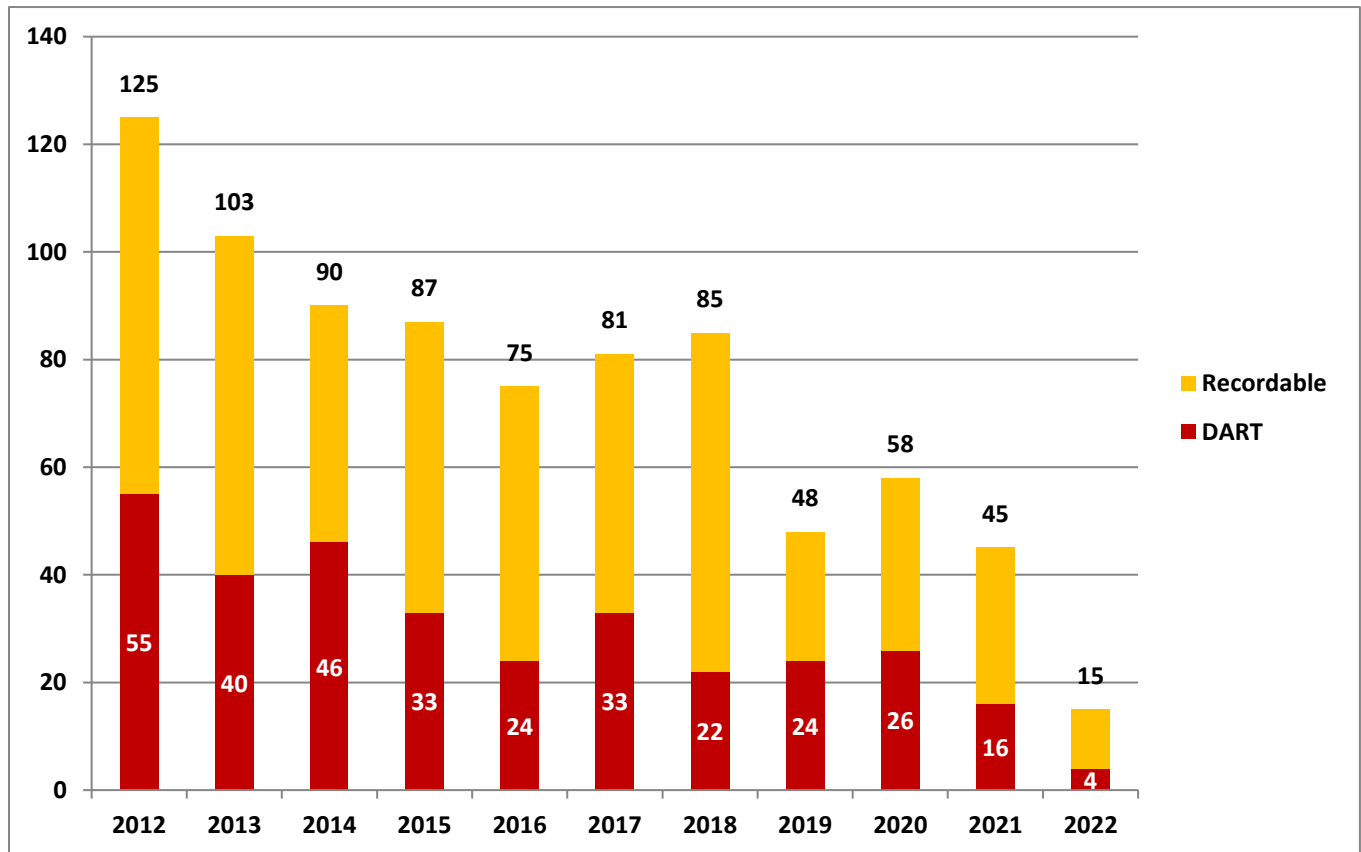
Fleet and Safety collaborated in integrating Motor Vehicle Accidents reporting into SMS and in improving the Monthly Vehicle Inspections in SMS by including vehicle cleanliness as an inspection item to improve cleaning and disinfecting measures before servicing. Fleet employees are participating in EV training courses customized to suit SMUD's needs in preparation for the transition to an all-electrified fleet by 2030.

All business units continue to partner in a consultative collaborative development of a World Class Safety program as One SMUD. One project that continues to support onsite personnel and operations by the Facilities department is installation of a passive HVAC ionization system called, needlepoint bipolar ionization (NPBI). Thus far DSO and SPA operations have units installed. With additional areas of the campus being assessed. These units have demonstrated performance in reducing indoor air particles during smoke wildfire events.

Driver Safety. In 2022 the Driver Safety program was reimplemented with COVID-19 safety protocols in place. Supervisors began conduction side by side ride alongs, in-person Smith System driving classes resumed and more Driving Rodeos were scheduled to meet demands. Due to the closure of 59th Street, the Driving Rodeo relocated to the HQ west parking lot however, with more employees returning to campus, another location was secured to accommodate the driving course. Safety and Facilities staff partnered with Safetyville to reserve space at the Army Depot for storage of equipment and supplies and set up multiple stations for the driving rodeo.

Appendix A

DART Count and OSHA Recordable 2012-2022



RESOLUTION NO. 22-10-05

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

This Board accepts the monitoring report for **Strategic Direction SD-10, Innovation**, substantially in the form set forth in **Attachment B** hereto and made a part hereof.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: September 28, 2022

FROM: Claire Rogers *CR 9/28/22*

SUBJECT: Audit Report No. 28007433
Board Monitoring Report; SD-10: Innovation

Audit and Quality Services (AQS) received the SD-10 *Innovation* 2022 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.

CC:

Paul Lau

Board Monitoring Report 2022

Strategic Direction, SD-10 Innovation



1) Background

SD-10 States: Delivering innovative solutions, products and services to our customers is a core value. To assure our long-term competitiveness, SMUD shall invest in research and development projects that support its core and key values, and integrate emerging technologies and new business models into SMUD's customer offerings in a way that balances risk and opportunity and benefits our customers and community.

2) Executive Summary

SMUD's Research & Development portfolio (R&D) addresses innovation and challenges in *electric transportation, energy efficiency, building electrification, load flexibility, thermal transition, and climate change*. The research provides insight into future planning and supports the development of near-term technology solutions for SMUD customers and the grid, in support of SMUD's target of zero carbon by 2030 and associated thermal transition. A number of foundational initiatives were launched or expanded this year to support SMUD's Zero Carbon Plan (ZCP) goals and significant effort was expended supporting the development of grant concepts to prepare SMUD to take advantage of pending state and federal funding opportunities.

Our conclusion is that SMUD is in compliance with SD-10 Innovation.

SD Requirement	Purpose	Outcome	Notes
Project Implementation	Project distribution indicates breadth of portfolio diversity and prioritization of program areas.	42 active projects in 2022. 7 projects are complete as of September 1, 2022 ¹ .	This reflects a 35% decrease in active projects and 56% reduction in completions compared to previous reporting period.
Risk	Technology risk assesses ability to meet expected performance goals. Implementation risk assesses probability of deployment.	74% of projects are deemed low to medium-low technology risk. 72% are deemed low to medium-low implementation risk.	The risk portfolio is consistent with the previous reporting period. Potential risks are managed by creating a diversified portfolio and partnering with other entities to distribute risk and mitigation.
Benefits	Research stage and benefits timeframe indicate the relevance of portfolio to address customer needs and strategic planning.	79% of projects are in stages 4-5 ² . 91% are expected to provide benefits to SMUD or customers within 5 years.	Percent of stages 4-5 is consistent with 2021's 80%, reflecting the shift in focus to near-term applications. Benefits time frame is consistent with 2021.

Table 1: SD Requirements Compliance

¹ Reporting metrics and achievements reflect the reporting period of October 1, 2021 – September 1, 2022.

² Stage 1 - Preliminary Investigation, Stage 2 - Concept Definition/Lab scale, Stage 3 - Concept Development (Prototype/bench scale), Stage 4 - Technology Development and Verification (pilot scale; field testing), Stage 5 - Commercialization

3) Additional Supporting Information

Project Implementation

SMUD's Research and Development team has the primary responsibility of meeting SD-10; however, notable relevant innovation occurs throughout SMUD.

Electric Transportation (ET)

Transportation electrification will improve air quality and reduce net greenhouse gas emissions and petroleum consumption to support energy sustainability, while creating new revenue streams for SMUD. This strategy is supported through investigation of mitigation of grid impacts due to charging, improvement of electric vehicles (EV) value via pricing signals and remote controls, increased EV adoption and access to charging.

Key Achievements:

- SMUD was awarded \$2.23M by the California Energy Commission REACH grant for the ChargeReady Community project, which will deploy EV chargers in underserved multi-family homes. SMUD expects to sign the grant agreement with the CEC in Q4 2022, which will fund 60% of the total project cost.
- The Residential Managed EV Charging project launched and enrolled the first customers Q3 2022. SMUD is partnering with GM, Ford and BMW to incentivize Sacramento-area customers to charge their EVs when it's most beneficial to the electric grid, using plentiful renewable energy. Customers plug in their vehicle and let the automaker know when their vehicle needs to be charged via a secure remote home charging management tool and smartphone apps.
- Building off the experience implementing the BESTFIT grant supporting the Twin Rivers Unified School District with equipment specifications and interconnection to pilot managed charging (V1G) and Vehicle-to-Grid (V2G) capabilities of electric school buses, SMUD is working to expand the pilot for V1G and V2G capabilities to other school districts and vendors with electric school bus fleets.
- SMUD's Fleet department is purchasing 5 medium-duty all-electric utility trucks from Zeus. Delivery of the trucks has been delayed by regulatory and technical issues, but they are in production and have received approval for state incentives for electric vehicles. R&D evaluation will commence upon delivery of the trucks.

Energy Efficiency (EE) & Electric Buildings (EB)

This program area optimizes energy delivery costs and improves grid asset utilization through targeted, time-specific energy efficiency and building electrification as well as by capturing permanent outcomes in building codes. R&D explores emerging and underutilized technologies; working to enhance advanced applications in building decarbonization and energy efficiency and increase technology adoption

Key Achievements:

- SMUD returned as a founding sponsor and contributing member of the Advanced Water Heating Initiative, an initiative formed to increase adoption of heat pump water heaters nationally. SMUD R&D team members lead the AWHI Residential Group, and a task group delivering a proposal for national Data Standardization and Sharing.

- The 120V Heat Pump Water Heater Field Trial has begun installations in customers' homes. 12 installations are expected to be completed in 2022, with monitoring and analysis complete by early 2024. The trial will investigate potential installation, performance, or customer satisfaction issues with these new units that avoid the need for a new 240V circuit to electrify the water heater.
- Completed evaluation of a novel, central heat pump water heater design without electric resistance backup elements at St. Francis Manor, a high-rise 128-unit senior community. Analysis showed 20% bill savings and 54% reduction in CO2 emissions annually compared to the gas boiler that was replaced.
- Staff completed phase 1 of the Home Infrastructure Planning project, creating a data collection and cleaning process for data sourced from inside and outside SMUD. Analysis to identify the magnitude and shape of load impacts to residential customers due to home electrification retrofits will be used in Phase 2 starting in 2023 to develop tools and forecasts to help distribution planners and customers make optimal decisions regarding utility service upgrades.

Load Flexibility

This program supports cost-effective, reliable, scalable flexible resource growth to serve future grid needs. R&D determines functional, operational and market viability of flexible loads to align supply and demand, give customers bill management options, improve air quality, and reduce carbon emissions.

Key Achievements:

- SMUD launched the My Energy Optimizer, Partner level, in June 2022 to evaluate aggregator management of multiple customer DERs to support grid services. The pilot leverages an aggregator to enroll customers and automate the response of their smart thermostats and batteries to utility dispatch signals, including a subset of customers enrolled on SMUD's Critical Peak Pricing rate. SMUD is launching Partner+ this fall, a program that leverages customer-owned and sited battery storage to operate a Virtual Power Plant, maximizing value to customers and benefitting the grid at times of high carbon intensity.
- SMUD is partnering with UC Davis and Panasonic to pilot the EnergyKit home energy management system in 8 SMUD customer homes. Customers will be able to automate their electric appliances, optimizing for comfort, convenience, and cost, in response to SMUD dispatch signals.

Thermal Transition

R&D pursues innovative grid, storage and generation solutions to facilitate SMUD's goal of zero carbon by 2030 and accelerate interconnection of grid-connected systems and devices to ensure safe and efficient operation. This program supports system reliability and reducing emissions through alignment of DERs and zero-carbon generation with grid needs. It seeks to improve grid reliability through reduced outage frequency and duration; control of the distribution system, voltage and frequency variations, and

overload conditions; and optimize grid benefits of DERs through advancing integration standards and coordinated automation.

Key Achievements:

- SMUD completed construction and all commissioning tests for grid support functionality for our first utility-scale battery project adjacent to Hedge substation. SMUD also received an EPRI Technology Transfer award for applying phase 1 of the EPRI Fire Prevention & Mitigation Project to the Hedge Battery. SMUD enrolled in phase 2 which includes developing training for first responders.
- Q3 2022, staff issued a Request for Information regarding Long Duration Energy Storage solutions to support SMUD's Zero Carbon Plan. The intent is to identify promising technological solutions to provide 300 MW of long duration energy storage with duration capability at least 8-10 hours at full output to maintain resiliency in an increasingly renewable generation portfolio.
- The EPRI supplemental project assessing NET Power's Allam Fetsvedt Cycle (a Super Critical CO2 Cycle) found that this carbon capture technology is not yet ready for utility implementation.
- The analysis of alternative fuels shortlisted two zero carbon fuel types (Renewable Natural Gas and Hydrogen) and five pathways as deserving of closer scrutiny. The five pathways include Renewable Natural Gas from dairy, landfill, wastewater and Forest Waste Biogas and Electrolytic Green Hydrogen.
- SMUD is one of 20+ industry and academia participants and eight National Labs collaborating on \$12.45M DOE grant for hydrogen blending research. Testing is underway to understand what upgrades to our pipeline would be needed to support up to 100% replacement of natural gas with hydrogen, supporting SMUD's zero carbon goal.
- The PREconfiguring and Controlling Inverter SEt-points (PRECISE™) software tool was developed at the National Renewable Energy Laboratory, with SMUD collaboration, and won the R&D 100 Award in 2019 from R&D World Magazine. In 2022, SMUD successfully finished implementing the tool with SMUD systems to enable interconnection of more behind the meter (BTM) PV while mitigating grid power quality issues by leveraging advanced inverter settings.
- Installed and began testing direct communication to smart-inverters to evaluate their potential to support distribution operations via the DERMS and the ability to replace PV production meters for residential customers.

Climate Change

This program provides technical, economic, and policy expertise on climate change and impacts to SMUD territory. It compliments SMUD's Zero Carbon Plan and aligns with our board direction to address climate vulnerabilities, and we partner with our customers and community on mitigation opportunities and regenerative, net positive projects.

Key Achievements:

- Carbon Farming and Ecosystem Service Research kicked off at Rancho Seco II. The project will evaluate the use of native pollinator plant species to reduce operational costs associated with vegetation management, erosion control and fire protection at utility

solar sites, quantify the impact on the power production of the PV system, and measure the carbon captured and sequestered in the soil by these plants.

Enterprise-Wide Innovations

While SD-10 innovation goals are met by R&D research programs, additional notable achievements occurred across SMUD supporting progressive customer offerings.

- The Innovation Program has continued to encourage employee participation in innovation at SMUD to accelerate digitization, drive acquisition of new data, embrace new technologies, expand new business models, and build new ecosystems to solve for SMUD's 2030 zero carbon objective and operational efficiencies. In 2022, 38 new ideas were submitted through IdeaHub, bringing the total to 79. Concepts successfully operationalized include:
 - Name Pronunciation Recording enables employees to record how to properly pronounce their name, which promotes equity and inclusion.
 - RealWear Headsets enable multiple subject matter experts to virtually attend a site visit with only one staff member physically deployed in the field, reducing travel and associated risks and costs.
- ADMS development complete, implemented Q3 2022. DERMs Phase 1 developed, implemented Q3 2022. Phases 2-3 are planned to go live Q1 2024.

Summary

As SMUD shifts to implementation of the 2030 Zero Carbon Plan, R&D has focused on ramping up efforts supporting thermal transition and load flexibility technologies and business models leveraging storage, electric transportation, and buildings, while we continue to advance research in climate change. These innovations expand customer choice and offer new solutions toward a low carbon future. Our diverse portfolio helps maintain long-term competitiveness and balance risk with potential environmental and economic benefits, ensuring community benefits.

4) Challenges

2022 continued in a primarily remote work environment due to the ongoing health pandemic, with increasing concern about supply chain and inflationary impacts. The new Enterprise Prioritization process involved a learning curve for staff submitting proposals for research and innovation. Staff resources were balanced between project planning and implementation and grant planning and acquisition to reduce SMUD's cost for research and demonstration projects. R&D revised the team reporting structure to better reflect two pillars of the zero carbon plan, thermal transition technologies and customer programs, and staff time was focused on providing subject matter expertise for efforts supporting zero carbon by 2030.

5) Recommendation: Recommend the Board accept the SD-10 Monitoring Report.

SD-10 Innovation 2022 Board Monitoring Report
Appendix

Table 2: R&D Projects

Research Program	ID	Project Name	Project Description	SD-10 Benefits	Start Date	End Date	Ward
Building Electrification	11	Direct Bury Customer and Building Analysis	Identify the locations, characteristics, and electrification market barriers for customers who are currently served by direct burial cables (DBC).	This will provide insights into the characteristics of DBC customers, and the related challenges to SMUD's decarbonization efforts.	9/28/2020	12/31/2021	All
Building Electrification	12	Electrification Readiness Study	Conduct an expedited utility industry analysis to identify key insights from utilities, community choice aggregators (CCAs), and other key market actors to accelerate electrification programs. The analysis informs a research-based approach for accelerating SMUD's own electrification programs.	Establishes a new paradigm for how research informs the development of incentive programs. Identifies opportunities for incentive programs to maximize outcomes like GHG savings, equity, and affordability. Creates rapid feedback on the performance of new technologies within programs.	8/20/2020	1/28/2022	All
Building Electrification	67	St. Francis Manor Central HPWH Study	SMUD staff will monitor the performance and benefits of converting a gas powered (boiler) domestic hot water system to a heat pump water heater (HPWH) driven system. The system will allow the customer to electrify the bulk of the hot water demand while not straining the electrical panel.	Confirm the realized savings and benefit of replacing existing boiler and gas-powered hot water systems in a central plant, which will inform replacements for the 50-100 similar commercial sites within SMUD territory that could electrify the hot water system.	4/1/2021	5/31/2022	5
Building Electrification	72	120V Heat Pump Water Heater Field Trial	Objective is to overcome electrification barriers by increasing options that reduce impacts on panel upgrades and provides solutions for space constraints such as multifamily. Conduct a statewide field trial of 120V heat pump water heaters, to ensure their performance meets the needs of customers, and to investigate typical installation costs and technical hurdles. The field trial is being conducted in coordination with other CA utilities as part of the Advanced Water Heater Initiative. 12 homes in SMUD territory will take part, out of a project total of around 60 homes.	SMUD will be one of the first utilities nationally to deploy 120V HPWH as part of a program. In parallel with introducing this new technology without delay, SMUD is testing its effectiveness in the field, in order to make course corrections to the technology and program delivery as needed.	4/27/2021	12/31/2023	All
Building Electrification	112	Home Infrastructure Planning Phase 1	Phase I leverages historical SMUD single-family electrification programs data to understand drivers for service panel upgrades. Collaboration with SMUD IT will generate Machine Learning predictions based on building attributes, customer demographics, and existing infrastructure. In later phases, these predictions will be the basis for customer engagements on building electrification, incentives programs, and predictive distribution planning.	Generating insights about infrastructure upgrades for SMUD distribution planners, electrification program designers, and SMUD Customers. The innovative tools produced in this project will help scale programs and optimally allocate resources towards 2030 ZCP goals.	10/22/2021	11/25/2022	All

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Building Electrification	115	Advanced Water Heating Initiative 2022 Sponsorship	SMUD is continuing as a 2022 sponsor of the Advanced Water Heater Initiative, which seeks to dramatically expand the heat pump water heater market using advocacy, program alignment, and research. SMUD was a founding sponsor of AWHI in 2021. The U.S DOE supports the initiative.	The project will set out a consensus agenda and process for water heating research, specifically joint research between utilities. It will also bring together best practices to ensure that SMUD and other utilities are implementing the most innovative programs.	1/1/2022	12/31/2022	All
Climate Change	64	Carbon Farming and Ecosystem Service Research at RSSII	Conduct field experiments at Rancho Seco to research ecosystems and evaluate the use of native species/pollinators to reduce the operational costs associated with vegetation management, erosion control, and fire protection. The project will explore the effects of vegetation and panel layout on PV generation and soil carbon.	The project will help identify and demonstrate strategies to integrate ecosystem services and agricultural value into large scale solar projects, helping to mitigate their environmental impact and build public support for their continued construction, assisting SMUD in achieving the 2030 ZCP.	1/30/2021	1/30/2026	2
Climate Change	96	EPRI Evaluating Landholdings for Monarch Habitat	The SMUD Pollinator working group will determine recommended actions, including proposed acres, timing and cost for enrollment in the CCAA, if appropriate.	Assists SMUD in understanding opportunities and costs associated with enrollment in the Monarch butterfly CCAA and compliance with a potential future Endangered Species Act listing.	3/1/2021	7/31/2022	All
Climate Change	109	Natural Refrigerant Incentive Pilot Program	Provides incentive for customer natural refrigerant systems, replacing super-polluting conventional refrigerants with high global warming potential. SMUD's first incentive program based on GHG reduction, not kWh savings. Monitored field pilots are underway at Grocery Outlet and Raley's stores in Sacramento.	DEED grant funding (\$125K) was secured to support the Grocery Outlet project and technology transfer. First of its kind for the utility industry, this program demonstrates SMUD's leadership in leveraging relationships with our customers to help them save money and reduce GHG emissions in the region.	1/1/2018	12/31/2022	All
Electric Transportation	15	Zeus Electric Truck Deployment	Collaboration with the California Mobility Center and Zeus Electric Chassis to deploy and test five Medium-Duty Electric Vehicles. Five unique configurations of the Zeus truck will operate in SMUD's fleet to study the performance, duty-cycle, and costs associated with utilizing electric trucks.	Inform both SMUD operations and customers of the challenges and benefits of fleet electrification. This project synergizes with the launch of the California Mobility Center which will support local economies and improve health and safety in DACs.	1/3/2023	6/30/2023	All
Electric Transportation	17	Del Paso Mobility Hub	Help create an e-Mobility hub for different modes of transportation, such as taxis, Uber, Jump, buses, etc. It will also include EV charging capability as well as gig cars. The first project in execution is the Del Paso Mobility Hub.	This is a novel project and transportation facility concept. It includes electric and fuel cell vehicles, including an electric shuttle, EV charging, shared vehicles, electric micro-mobility (ebikes and electric scooters) and transportation services.	9/1/2022	8/31/2023	5
Electric Transportation	18	Mobi EV and Gen Charger Loan Pilot Program	Test and understand the technical and economic viability as well as the logistic application of mobile electric vehicle (EV) chargers and battery powered generators to support the development of transportation electrification and elimination fossil fuel generators. SMUD loans the units to customers who can demonstrate they have a need for the chargers at no cost.	Acquire knowledge about mobile battery powered EV chargers and generators, which may play key roles in transportation electrification. This pilot also yields learnings regarding loan programs and potential revenues from rental units.	8/3/2020	3/31/2022	All

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Electric Transportation	20	Twin Rivers Commercial Managed Charging (V1G, V2G)	Incorporate electric school buses and light duty vehicles to evaluate the effectiveness of managed charging and vehicle-to-grid capabilities to balance impacts on customer and utility electrical distribution and create value through grid services.	V1G findings will support smart charging applications which can mitigate customer charging costs and support grid management and deferred infrastructure upgrades. Reduce grid impacts, reduced customer infrastructure build-out cost, wholesale energy or capacity cost avoidance, and mirror characteristics of stationary storage using V2G.	1/30/2021	9/30/2024	5
Electric Transportation	21	EPRI Qualification of EVSE	Produce a compliance matrix for EVSE that SMUD will be able to use to qualify EVSE vendors for our EV-related programs.	Increase EV adoption by having publicly available working charging stations in high trafficked areas.	1/6/2020	3/31/2022	All
Electric Transportation	22	Residential Managed EV Charging (V1G)	Actively manage residential EV charging times and peak power consumption. Managed EV charging can enable deferment of distribution system upgrades, smooth the duck curve, reduce renewable generation curtailment, and provide import and export arbitrage opportunities.	Benefits include reduction of the financial risks associated with transportation electrification, specifically by mitigating the risk of overloading electrical distribution infrastructure. Another secondary benefit is to better align energy delivery for charging with low-cost energy supply.	10/1/2021	12/30/2024	All
Electric Transportation	24	SMUD-Owned EVSE	Operation and maintenance of SMUD's public level 2 and DCFC charging stations.	Increase EV adoption by having publicly available working charging stations in high trafficked areas.	1/1/2014	12/31/2027	All
Electric Transportation	97	ChargeReady Community	ChargeReady Community is the Sacramento region's replicable, equity-first EV charging solution for multi-family housing (MFH). Powered by SMUD and in partnership with community-based organization and site host Mutual Housing California and Sacramento Metropolitan Air Quality Management District, ChargeReady Community will deploy a pilot model that transitions EV charging in under-resourced communities from inaccessible amenity to expected, critical infrastructure.	Help SMUD better understand the challenges and opportunities of deploying EVSEs in multi-unit dwelling in underserved communities, helping SMUD advance the adoption of electric transportation, which contributes to GHG emissions reductions, and promoting equity in transportation.	5/11/2022	6/30/2025	All
Electric Transportation	104	Light Duty Fleet V2G	This project will test and demonstrate V2X functionality on campus with capable fleet vehicles such as the Nissan Leaf and Ford F150 Lightning. We hope to understand interconnection process, installation requirements, and V2X functionality through this project before proposing a larger scale pilot.	Informed deployment of light-duty V2X will reduce grid impacts and customer infrastructure build-out costs. LDV fleet management can also offer wholesale energy or capacity cost avoidance, and mirror characteristics of stationary storage.	1/1/2022	12/31/2023	All
Electric Transportation	107	V2G Commercial Expansion	This project will build off the electric school bus project with Twin Rivers Unified School District. We will demonstrate and test Automated Load Management, Managed Charging, and Vehicle to Grid functionality with electric school buses and other capable EVs.	Reduce grid impacts, reduced customer infrastructure build-out cost, wholesale energy or capacity cost avoidance, and mirror characteristics of stationary storage using V2G.	1/1/2022	5/30/2024	All

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Energy Storage	5	Residential Energy Storage Programs	Continuation of Residential BTM energy storage systems including Commitment to Operate, Smart Energy Optimizer, and PowerMinder. Study of these systems will answer research questions regarding how customers respond to dispatch models, what communication standards could promote battery manufacturer relationships and data communication quality.	Residential BTM energy storage are customer-facing innovations that will provide resilience and system benefits to customers and SMUD alike. This work will inform future pilots including Multi-DER and Capacity Contracts VPPs.	1/1/2021	12/31/2023	All
Energy Storage	6	Hedge Utility-Scale Battery	Deployment and operation of a 4 MW / 8 MWh utility-scale storage battery to test different operational modes and grid interactions.	The Hedge Battery supports the StorageShares program and SMUD's goal of adding 1,100 MWs of battery capacity in the coming decade. Proximity to the Sacramento Power Academy training facility will foster opportunities for workforce development in battery storage operations.	3/1/2019	12/31/2023	3
Energy Storage	26	Integrated EV Charging with Storage and Solar PV	Install and test a new 175 kW DC Fast Charger and 2nd-life battery storage. Integrate solar, storage, and EV charging into an advance site controller.	Help promote EV adoption by using load management to prevent unnecessary infrastructure installations, ultimately saving the customer and SMUD time and money.	11/5/2018	12/31/2021	3
Energy Storage	29	Sunverge in Schools	Partner with schools to install eight battery energy storage units at high schools or colleges to provide early hands-on education of battery energy storage systems.	Support local workforce development by developing a battery energy storage curriculum and installing battery energy storage system at educational institutes.	1/1/2021	12/31/2022	
Energy Storage	87	LDES Market & Technology Report	This project performed detailed technology and cost characterization of Long Duration Energy Storage (LDES) technologies. Perform an assessment of the viability and adoption of LDES that provide compelling features to help mitigate the issues associated with variable and intermittent renewables by improving its dispatchability and help meet or exceed SMUD's Zero Carbon Plan (ZCP). Investigate current, planned and potential LDES technologies that will provide highest values to SMUD. Perform comparative analysis of viable LDES technologies, discuss pros & cons, along with attributes for next steps that will meet or exceed ZCP.	Empower SMUD planners to make confident technology decisions along the flexible path to zero carbon. These technologies will provide grid stability and predictable electricity prices for SMUD customers.	4/29/2021	4/29/2022	All
Generation and Sequestration	34	Dairy Digesters eRIN Applications	Develop and submit the biogas-to-electricity pathway applications for Van Steyn, Van Warmerdam and New Hope dairy digesters under the Renewable Fuel Standard (RFS) for electricity Renewable Identification Number (eRIN) credits, generated when electricity produced from dairy digester biogas is used to charge electric vehicles in SMUD service territory.	The use of eRIN credits could unlock \$0.12/kWh to \$0.33/kWh of electricity generated for electric vehicle charging. This legal and financial innovation offer sound investment into biofuels production and carbon-negative transportation for electric vehicles.	1/1/2021	12/31/2022	7

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Generation and Sequestration	38	PRECISE Project Phase 2	Evaluate PV interconnection applications and identify the advanced inverter settings that each PV system to be set to. This process will significantly save SMUD engineer's time and yet maximize the benefit of each asset.	Increased safety and avoiding reprogramming of advanced inverters post-install, and minimizing curtailment. Deploying the tool in a real utility environment would advance chances of commercialization of PRECISE and revenues to SMUD.	1/1/2019	6/30/2022	All
Generation and Sequestration	39	LCFS Electricity Pathways for Dairy Digesters, Solar and Wind	LCFS Electricity pathway applications for Van Warmerdam, Van Steyn and New Hope dairy digesters, wastewater biogas and wind/solar that perform carbon intensity life cycle modeling, certification, verification, monetization, and reporting for LCFS credits to charge electric vehicles in SMUD territory. This initiative stimulates revenue generation, supports the growth of electric transportation and advanced renewable generation and helps achieve carbon zero target goal.	At full utilization of the 30 dairies and 14,000 cows in SMUD territory, the dairy digesters could offset a minimum of 70,000 Metric Tons of CO2 per year, while garnering \$12.6 Million per year in LCFS credits. In 2021, Van Warmerdam and Van Steyn reduced 7,856 MT of GHG worth \$1.2M LCFS. This project also proved the financial viability of Zero Carbon Intensity (CI) wind generation, which garnered approximately \$1 Million from LCFS.	6/1/2019	12/31/2030	All
Generation and Sequestration	55	DER Carbon Tool	Expand DER planning and modeling tool that assesses carbon reduction/savings, budgeting, portfolio optimization, cost effectiveness and load forecasting to include EE, Load flexibility, ET solar PV and battery storage measures.	Provide hourly forecasting of load shapes, evaluate carbon impacts and cost effectiveness for programs. Provides insights about DER valuation and the attribution of GHG reductions.	11/1/2020	12/31/2021	All
Generation and Sequestration	75	Wind Resources in Northern CA, 2 Terrawathours	This study will help SMUD identify sites in Northern California suitable for adding wind generation. The work will be performed by a consultant.	Identifying areas outside of SMUD's service territory suitable for wind resource, will enable SMUD to remain on track to meet the 2030 carbon reduction goals.	4/28/2021	4/28/2022	All
Generation and Sequestration	77	NET Power - Allam Fetvedt Cycle (Super Critical CO2 Cycle) Study	Participation in the EPRI supplemental project which will perform research on the Allam Fetvedt Cycle for supercritical carbon capture. The project will yield a technology assessment, value proposition, and analysis of SMUD-focused applications.	Key information will be provided on the design of Allam-Fetvedt Cycles during this project, along with detailed testing data and performance assessments. The project will look to provide insights and lessons learned on the technology and its operations, giving more evidence of its potential viability for low-carbon power generation.	4/28/2021	12/31/2022	All
Generation and Sequestration	81	Assessments of Alternative Fuels (Generation)	SMUD will hire a consultant to explore the feasibility of using renewable ethanol, biodiesel, renewable diesel, RNG & others as potential fuel-sources for our thermal generation assets.	This assessment will facilitate enterprise decision-making, providing a deep understanding of the resource sustainability, supply chain landscape, price forecasts, market trends, and techno-economic feasibility of each biofuel.	4/28/2021	4/28/2022	All
Generation and Sequestration	91	Hydrogen Blend Collaborative Research	Address the barriers on pipeline materials compatibility and degradation related to the blending of hydrogen into natural gas pipelines, a concept referred to as HyBlend. SMUD will provide data and serve as one of the injection points of H2. The data that will be	The HyBlend project will specify the role Hydrogen can play in the transformation of SMUD's thermal generation. HyBlend is a leading fuel choice that offers benefits for seasonal energy storage, resilience, and GHG emissions reductions.	7/1/2021	7/30/2023	All

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			provided will be analyzed to quantify the costs and opportunities of H2 production and integration into the natural gas system.				
Grid Evolution	36	EPRI SHINES	Beneficial integration of solar PV, energy storage, load management, and solar forecasting. EPRI will test the architecture at three sites to compare configurations and size, as well as grid connections, and solar generation variability.	Enhanced grid operations, increased PV deployments, time shifting of solar generation, improved generation/load profiles, reduced grid impacts and interconnection processing time and cost.	11/1/2019	4/29/2022	All
Grid Evolution	45	Transmission Line Monitoring	Test the achievability and usability of Dynamic Line Ratings (DLR) to inform short-term operational and long-term planning decisions, using the LineVision V3 monitoring system.	Increases efficiency of transmission asset utilization while maintaining reliability. Advanced line rating methodologies can result in cost savings and operational benefits.	4/22/2021	12/31/2023	All
Grid Evolution	52	HQ Solar Port Microgrid	Install and commission a small microgrid at the HQ Solar port using second-life batteries, solar and an advance site controller. These activities provide insights regarding DSO operating processes, microgrid maintenance downtimes, data communication, and operations during normal and emergency conditions.	Microgrids can increase reliability by providing backup power to customers during power outages using renewable generation, reduce transmission infrastructure needs, and hedge against volatile energy markets.	1/1/2021	12/1/2022	3
Grid Evolution	61	3M Spartan II	The Spartan units will be used to gain visibility on the downtown network where we currently have none.	Savings on SCADA for the downtown network and reduction in time for restoring service.	11/5/2018	11/5/2021	5
Grid Evolution	80	EPRI 2021 Utility Blockchain Interest Group	Work alongside other utilities to expand knowledge of blockchain technology and its potential applications. Enable collaboration among utilities and act as a bridge to the startup/vendor community, compile and track a comprehensive list of global utility blockchain pilots and extract and document industry trends, lessons learned and key insights.	Through a collaborative approach, expand utility knowledge of blockchain technology and its potential applications in the industry. Enable collaboration opportunities among utilities and act as a bridge to the startup/vendor community.	1/1/2021	12/31/2021	All
Grid Evolution	89	Smart Inverters	This project will test smart inverter connection via two pathways: direct connection and through vendors/aggregators. Direct connection will assist in development of the DERMS, while the vendor/aggregator pathway leverage OEM and aggregator relationships to establish pilot access agreements to a broader range of smart inverters.	Smart inverters are new technology that allows SMUD to monitor residential PV and storage and provides control functionality to assist in grid support.	7/1/2021	3/31/2023	All
Grid Evolution	100	EPRI Transmission & Substations Collaborator Project	Participation in this EPRI collaborative enables SMUD to stay current on industry-wide EPRI R&D, including results of advanced technology testing, software tool development, reference guides and the application of research results.	Apply EPRI tools and research results in Overhead Lines, Underground Lines, Substations, and Asset Analytics. Increased knowledge of failure rates and emerging issues by contributing to and accessing EPRI's T&S Asset Industry-Wide Databases.	1/1/2021	12/31/2021	All

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Load Flexibility	49	My Energy Optimizer Partner (Multi-DER VPP)	This project will research the ability of the proposed solution to orchestrate a diversity of qualifying residential customer-sited devices to deliver load flexibility needs throughout the year and to assess whether it makes sense to continue to scale-up.	Upon successful completion of the Multi-DER VPP, SMUD will have a reliable flexible residential load program. This load will be integrated with the DERMS and allow SMUD to operate as required for business needs (EIM/RA/Emergency).	1/5/2021	12/31/2024	All
Load Flexibility	69	EnergyKit HEMS field demo	Ynventive is designing, building, and testing the EnergyKit, as well as demonstrating its effectiveness at a chosen site in Davis, CA. SMUD is providing inputs on typical home energy use patterns and technological considerations pertaining to SMUD's operations.	Successful development may persuade Panasonic and NEDO to match up to \$20M in DOE or CEC grant funding to deploy a field demo to dispatch customer loads using price signals with the confidence and reliability of a VPP product.	4/30/2021	2/28/2022	All
Load Flexibility	99	Oracle Behavioral Demand Response Evaluation	R&D provided a 3rd party evaluation of Oracle Behavioral Demand Response (BDR) to confirm results. This project aims to fulfill the boards desire to have a demand response program for all customers.	Having a demand response program available to all customers, regardless of technology, is an important step towards meeting the 2030 goals.	6/14/2021	2/28/2022	All

Table 3: Enterprise-Wide Initiatives

Initiative Name	Initiative Description	Initiative Benefits	Start Date	End Date	Ward
Innovation Program (IdeaHub)	Innovation at SMUD comprises of exploratory activities related to new strategies. The IDEAHub portal captures technology, business model, and operational efficiency opportunities submitted by employees to support SMUD Innovation.	The Innovation team will propel us towards our 2030 absolute zero carbon goal by balancing diverse emerging technologies and ideas across the organization that drive operational efficiencies and competitive advantage with a centralized team that can champion breakthrough innovations.	2021	Ongoing	All
Name Pronunciation Recording	SMUD'S IT team worked to identify software that can support an employee recording the pronunciation of their name so that colleagues can learn the correct way to pronounce names that may appear unfamiliar.	This software solutions helps employees learn other employee's names, increasing inclusion and employee morale.	11/10/2021	6/14/2022	All
RealWear Headsets	RealWear Headsets allow staff to call in to site visits and see a live video feed from their computer and communicate in real-time with the person in the field.	Using RealWear camera allows one subject matter expert to attend site visits while other SMEs participate from their home/office. This reduces the number of staff required to travel and attend field meetings in person.	8/27/2021	6/15/2022	All
DERMS	Strategic business partnership with OSI to develop a Distributed Energy Resource Management System whereas SCADA and behind the meter resources can be used to solve distribution constraints, participate in the market, and manage flexibles loads.	Leverage DER capabilities to meet economic objectives, peak load reduction, local constraint issues, deferred infrastructure investment, and grid optimization. As OSI's partner, SMUD shares revenue from future sales.	2018	2028	All
ADMS	Implement a real-time Advanced Distribution Management System (ADMS) Platform (DMS and D-SCADA) to improve management and control of distribution system, enhance distribution operations functions, optimize distribution system and improve forecasting accuracy.	ADMS is the foundation to support providing SMUD's Distribution System Operations a 360 view of distribution and is required to support future DERMS Phases.	02/2018	2022	All

RESOLUTION NO. 22-10-06

**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 C** hereto and made a part hereof.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: September 28, 2022

FROM: Claire Rogers *CR 9/28/22*

SUBJECT: Audit Report No. 28007423
Board Monitoring Report; SD-19: Diversified Business

Audit and Quality Services (AQS) received the SD-19 *Diversified Business* 2021 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.

CC:

Paul Lau

Board Monitoring Report FY 2021

SD-19, Diversified Business



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 2021, the actual costs and revenues for each portfolio are as follows:

Portfolio	Total Expenses	Total Revenues	Total Net Revenues
New Revenue Program	\$ (7,441,337)	\$ 10,902,597	\$ 3,461,261
Legacy Revenue Programs		\$ 3,748,833	
Innovation Generator Program		\$0	
Total		\$14,651,430	

3) Additional Supporting Information

a) Financial Summary

A total of 13 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 \$3,748,833 were \$874,874 above planned revenues of \$2,873,959. Within the Legacy Revenue Programs, Cell Site Revenue and Home Power contributed most of the revenue out of the portfolio. The Innovation Generator Program actual revenues were negligible; again, there is no plan tracked for this program.

There have been no new deals added to the New Revenue Program in 2021. The New Revenue Program generated \$10,902,597 in revenue which was \$837,972 above the planned revenue of \$10,064,625. The actual expenses of \$7,441,337 were \$1,090,722 lower than the planned expenses of \$8,532,059. This resulted in positive net revenue of \$3,461,261 compared to a planned positive net revenue of \$1,532,566 – a variance of \$1,928,694. The biggest driver of this improvement over plan is due to the Community Energy Services

Program performing 80% better on a net basis than planned. The program performed better on both on reducing costs more than planned while increasing revenue more than planned.

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 2021, this team was dedicated full time to 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 2020 assessment as no new opportunities were added. The previous overall portfolio risk was rated low. For 2021, 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 positive net revenue for the second year in a row.

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 2021, SMUD generated over 60% more revenue in excess transmission sales than was planned.

4) Challenges

Regimented cost and revenue tracking will be paramount to assessment of performance under SD-19. Staff is working diligently to maximize the revenue generation that is possible from all three portfolios.

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. New revenue generation opportunities aligned to SMUD's 2030 zero carbon goals will be a priority. As an example, the California Mobility Center will continue to play a critical role in helping to identify new zero emission mobility solutions aligned to SMUD's goals. Additionally, SMUD's participation in the Global Mobility Strategic Fund – a venture fund established to support early-stage mobility companies – will create new opportunities for revenue generation from this sector.

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.

5) Recommendation

It is recommended that the Board accept the Fiscal Year 2021 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. **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.
2. **Intelligent Energy Solutions:** Software that minimizes certain electrical end uses in the customer's home (e.g. pool pumps).

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: **Impact x [(likelihood+velocity)/2]**

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

Appendix B

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

RESOLUTION NO. 22-10-07

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

This Board accepts the monitoring report for **Strategic Direction SD-13, Economic Development Policy**, substantially in the form set forth in **Attachment D** hereto and made a part hereof.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: October 5, 2022

FROM: Claire Rogers *CR 10/05/22*

SUBJECT: Audit Report No. 28007427
Board Monitoring Report; SD-13: Economic Development
Policy

Audit and Quality Services (AQS) received the SD-13 *Economic Development Policy* 2021 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.

CC:

Paul Lau

1. Purpose & Background

Strategic Direction 13 (SD-13) Economic Development states that:

“Promoting the economic vitality of our region and the growth of our customer base is a key value of SMUD. Therefore, SMUD shall exercise strategic leadership and actively participate in regional economic development.

Specifically:

- a) SMUD shall promote innovation while maintaining rate affordability and balancing the other strategic directions.
- b) SMUD shall align its economic development activities with regional economic development initiatives.
- c) SMUD shall assist in retaining, recruiting and growing commercial and industrial rate-paying customers.
- d) SMUD shall offer economic development rates and program incentives.
- e) SMUD shall offer a contracting program for certified small businesses who are rate-paying customers.

2. Executive summary

SMUD is in compliance with SD-13, Economic Development.

SMUD continues to be a nationally recognized leader in corporate citizenship for our long-standing commitment to the economic health of the greater Sacramento region. In 2021, we continued our support for and engagement with the struggling business community to help meet their needs during the COVID-19 pandemic by pivoting and adapting our support to meet their evolving needs. We leveraged key partnerships to support a shared vision of economic recovery, while delivering greater collective impact and advance an inclusive and equitable economy. Additionally, we aligned our economic development efforts with SMUD’s vision to be a trusted and impactful partner in achieving an inclusive, zero carbon economy. We leveraged our 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.

Our strategy to enhance the economic vitality of the Sacramento region is comprehensive. Key tactics to engage, inform and support the regional business community include:

- Advancing SMUD’s 2030 Zero Carbon Goal in inclusive, regional economic development efforts
- Broadening support of the region’s emerging innovation ecosystem, including the California Mobility Center
- Supporting business formation, attraction, retention, and expansion efforts
- Providing business development resources for entrepreneurs
- Improving the Supplier Education and Economic Development (SEED) contracting program for local small businesses
- Continuing to offer and enhance economic development rates

- Providing energy efficiency programs and electrification incentives and rebates
- Expanding local agency and nonprofit partnerships to support community development
- Deploying significant resources to support a Sustainable Communities plan that can be replicated and measured for effectiveness and impact
- Ensuring our commercial and industrial service connection costs are in-line with other West Coast electric utilities
- Supporting the developer community

Through outreach and education, SMUD's Supplier Education and Economic Development (SEED) team teaches local small businesses how to contract with SMUD and positively impact their bottom line. SEED offers incentives to local small businesses that participate in SMUD's competitive bid process. It also helps prime contractors find local sub-contractors, which helps them gain a competitive edge when developing their bids or proposals. In 2021, the SEED program partnered with Supply Chain Services, conducting a variety of outreach and education events and awarding 23% of SMUD's contracts to SEED-certified small businesses, exceeding the Board-established goal of 20%. Over 115 SEED contracts were awarded in 2021, totaling \$48 million dollars.

SMUD works with over 50 local economic development organizations to enhance regional economic vitality. Our leadership roles in the Greater Sacramento Economic Council (GSEC), Valley Vision, Sacramento Metro Chamber, Urban Land Institute, Downtown Sacramento Partnership, Sacramento Black Chamber, Sacramento Hispanic Chamber, Sacramento Asian Pacific Chamber, SACOG, SacPAC and many others help ensure our activities support the region's efforts to attract, retain and expand companies in our service area. It also means SMUD has a seat at the table early on in economic development conversations. Other major tactics to encourage regional economic development include our dedicated Commercial Development and Commercial Delivery teams.

Business attraction was a key economic development focus in 2021. We participated in 57 business attraction, retention and expansion projects, supporting the attraction or expansion of seven companies and the creation of an estimated 442 jobs within our service area in multiple sectors including mobility, manufacturing, technology expansion and finance and banking.

3. Information about our 2020 efforts to achieve the specific elements outlined in SD-13 is provided in the following section.

a) SMUD shall promote innovation while maintaining rate affordability and balancing the other strategic directions.

As SMUD adopted our bold 2030 Clean Energy Vision to reach zero carbon, we heightened our focus on opportunities to promote awareness, innovation, and job creation with local startups in electrification, transportation, and clean technology. We continued to collaborate and amplify the California Mobility Center (CMC), engage the clean tech community through CleanStart, and inspire the future workforce through partners like HackerLab and StartupSac. All of these efforts are increasing investments to develop new solutions for clean energy, workforce development, and a thriving inclusive economy.

The New Business Development (NBD) Team planned, incorporated and launched a new nonprofit corporation, the CMC in 2020. The CMC applied for and received IRS tax exempt 501(c)(3) status in 2020. After securing a lease for its initial 25,000 square foot manufacturing and prototyping facility at Depot Park, CMC procured its initial baseline

equipment and was commissioned in Q1 2021. The facility, called Ramp-Up-Factory (RUF) is operational with training suite installed. 15 service provider contracts were executed with additional consultants and strategic partners that continue to support the CMC and CMC clients.

In 2021, CMC expanded the Board from a Founders group of five to a broad-based Board of 16, with strong automotive sector representation. CMC developed its online, recruitment management tool to expand its membership campaign. By year-end, CMC reached a total of 39 members, with 98 representatives registered in the online portal. Additionally, CMC launched various membership committees, launched the Industry Advisory Council and monthly CMC Thought Leadership webinar series.

CMC designed and developed materials for the organization's marketing and public relations initiatives. CMC continually updated its rebranded website (www.californiamobilitycenter.org), and wrote/distributed eight press releases in 2021 reaching over 15,000 media industry views. CMC appeared in over 213 industry and news articles and sponsored twelve industry events held in the US and internationally.

Lastly, the CMC workforce program has provided training in partnership with community-based organizations, adult learning centers and CSU Sacramento. The Workforce Pathways Partnerships Program started in 2020 with a \$1.4 million CARES Act grant from the City of Sacramento. In 2021, CMC received a \$600,000 grant from California Workforce Development Board to advance jobs and training associated with the climate and technology impacted industries. CMC was able to assist 115 people in securing internships or employment through the Workforce Pathways Partnerships Program.

SMUD continues to effectively balance our goal of fostering innovation with our commitment to keeping rates low. SMUD's average rates will remain competitive even after the adopted rate increases for 2022 and 2023. In 2021, SMUD's system average rate was 37.0% below PG&E. PG&E's 2020 General Rate Case Phase I that was approved by the CPUC included revenue requirement increases for calendar year 2020 through 2022. A detailed summary of SMUD's rate competitiveness is provided in Appendix A.

b) SMUD shall align its economic development activities with regional economic development initiatives

Supporting the local economy through the ongoing COVID-19 pandemic was a regional priority in 2021. SMUD engaged at the highest levels in regional economic recovery initiatives and took direct action to reach our commercial customers. SMUD partnered with the Sacramento Metro Chamber to underwrite its COVID-19 Business and Economic Task Force briefings, convening more than 50 local representatives across all levels of government, industry and community leadership. SMUD leveraged the opportunity to share information about our programs and services to support impacted businesses and gather information to share directly with our customers. Through our active engagement in the State Sprint effort, we were able to position the CMC as a key priority for investment and showcase SMUD's Sustainable Communities Resource Priorities Map. This effort was organized by the Sacramento Asian Pacific Chamber in partnership with GSEC, SACOG, Valley Vision, the Sacramento Metro Chamber and City of Sacramento. SMUD participated in the Sacramento Metro Chamber's virtual Cap-to-Cap program to advocate for federal resources to aid the business community's recovery. SMUD stepped up as a lead supporter of the Minority Business Assistance and Recovery Kickstart (MBARK) program, a comprehensive, multi-pronged approach geared to assist minority small business owners in the community. MBARK utilizes understanding and expertise on what minority small

business owners may need and showcases how to proactively engage them in order to stabilize and grow their businesses. SMUD also joined forces with Sacramento State, Los Rios Community College District, UC Davis, UC Davis Health System and Aggie Square to form an Anchor Institution Coalition to explore workforce and economic development pathways to support the greater Sacramento Region. The economic, intellectual, and human capital places an anchor institution in a unique position to improve and enrich the surrounding community in partnership with other key place-based stakeholders from sectors such as government, business, and faith, as well as community-based organizations and local residents. We provided resources to implement the Capital Region Prosperity Strategy and served on the Steering Committee for the Internal Study Mission. Also, we remained in constant contact with all our business community partners to lend support.

In 2021 SMUD's Small and Midsize Team of Strategic Account Advisors continued to offer assistance to customers, directing them to appropriate SMUD programs and providing financial relief related information. The "Here to Help" campaign continued into 2021; this overarching awareness campaign focused on delivering information and resources to our business customers. SMUD continued to maximize the use of targeted digital tools supporting small and midsize business customers. As the COVID-19 global pandemic persisted, small and midsize businesses continued to struggle through financial challenges, supply chain issues and employee retention dilemmas. For a detailed description of the efforts of SMUD's Small & Midsize Business Team of Strategic Account Advisors, and of SMUD's "Here to Help" campaign, see Appendix B.

SMUD plays a critical role in GSEC. In addition to Paul's participation on the GSEC Board, the business attraction team serves on the Economic Development Directors' Task Force. Given the focus on climate change and carbon neutrality, SMUD has played an increasingly important role in business attraction, retention, and expansion.

During the past year, SMUD provided support in the attraction of seven new companies that will create 442 jobs in SMUD's service territory. Detailed information about SMUD's role in key regional economic development organizations is provided in Appendix C.

To promote workforce and equitable economic and community development, SMUD continues targeting economic development, community/environmental health, and neighborhood outreach activities in vulnerable and under-resourced communities through its Sustainable Communities program. SMUD has invested over \$11.46 million into this effort, leveraging partnerships to increase impact in these areas of need. Additional information regarding Sustainable Communities can be found in Appendix B.

c) SMUD shall assist in retaining, recruiting and growing commercial and industrial rate-paying customers

The Commercial Development team actively engaged 225 commercial, industrial, mixed-use and residential project developers throughout our service territory. We partner with community organizations and municipalities to attract, retain, and grow existing companies.

To support the creation and growth of small businesses, SMUD supported the Capital Region Small Business Development Center (SBDC), which helped 24 businesses start up, retained 8,056 jobs, created 575 new jobs and helped businesses access \$38.7 million in capital during 2021.

d) SMUD shall offer economic development rates and program incentives

In 2020, SMUD offered an Economic Development Rate (EDR) to incentivize the attraction, retention, and expansion of businesses within our service area. A description of the current EDR can be found in Appendix D.

SMUD conducted strategic outreach and engagement to developers and builders of residential subdivisions and multifamily developments about its Smart Homes program offerings and incentives for All-Electric Smart Homes, SolarShares, and battery storage.

e) SMUD shall offer a contracting program for certified small businesses who are rate-paying customers

Our SEED program offered certified small businesses incentives to participate in SMUD's competitive bid process. It also helped prime contractors find local subcontractors to gain an advantage in developing their bids or proposals. To this end, the team provided 131 lists of SEED qualified vendors in specific categories to contractors interested in leveraging the SEED program in their bid responses.

The SEED team held 27 workshops, orientations or panel discussions and coordinated participation in over 100 outreach events, reaching approximately 3,000 individuals. In addition, the team hosted the first Spanish--language "How to do Business with SMUD" workshop for the Sacramento Hispanic Chamber's Emprende cohort.

SMUD's annual goal is to award no less than 20% of all contracts to certified small businesses. We exceeded that goal in 2021, awarding 23% of contracts to SEED qualified vendors, totaling \$48 million.

The SEED team also coordinated the Business Advisory Council (BAC). The BAC raises local business awareness about contracting with SMUD and makes recommendations for improvements to our contracting process. SMUD hosts quarterly meetings for over 40 member agencies, including regional Chambers of Commerce and Property and Business Improvement Districts.

For more information about our 2021 efforts to promote our SEED program, and the achievement of our SEED goals, please see Appendix E.

- 4. Challenges:** California's regulatory climate, the costs of doing business, new code and regulatory standards present steep challenges to development. Permitting costs and delays pose barriers to market, leading companies to relocate to other states. Limited availability of a trained workforce present challenges. SMUD continues to work with regional and state partners, such as GSEC, GO-Biz and the California Association of Local Economic Development, to address the state and local regulatory challenges that limit our ability to attract or develop new businesses.

Supply chain disruptions and inflation resulting from the COVID-19 pandemic also continue to pose significant economic challenges for the Sacramento region and the full effect is yet to be realized. The percentage of employees that will remain working from home will impact the demand for office space and traditional business attraction efforts. We may also need to reevaluate the way we support the existing business community as it recovers from the pandemic.

- 5. Recommendation:** It is recommended that the Board accept the Monitoring Report for SD-13, Economic Development.

APPENDIX A

SMUD shall promote innovation while maintaining rate affordability and balancing the other strategic directions.

SMUD's approach to innovation includes investments in regional accelerators, incubators, and curriculum delivery that complements business development efforts.

For corporations and startups alike, achieving success and growth depends on a support network and ecosystem in which to collaborate. SMUD's approach is to continue to identify the problem solvers within our community, and strategically invest in their programs that will grow our region's knowledge economy. Key 2021 developments in the mutually beneficial relationships Economic Development and Partnerships supports in the innovative entrepreneurship ecosystem include:

CleanStart Inc. focuses on developing clean tech companies in the Sacramento region through education, capital, and connections. Having successfully pivoted much of their programming to virtual the year prior, CleanStart continued to offer monthly meetups as well as a Perspectives webinar series, hosting 35 real-time events reaching over 1,000 attendees on topics such as decarbonization, energy storage, recycling, clean tech investment, and mobility. Additionally, CleanStart leveraged their events to create a recorded video library of resources, reaching over 4,500 views to date, and mentoring six companies for 2021 CalSEED awards.

Hacker Lab is an all-in-one makerspace, coworking facility and workforce incubator as one of the most recognized centers for innovation in the region. SMUD continues to invest in their programs end-to-end, including their maker education programs, entrepreneurship business accelerator, and their career pathway development program, to support the dreams of underserved Sacramentans. In partnership with SMUD, Hacker Lab's team and workforce equity programs boosted Sacramento-area entrepreneurs and small businesses during the pandemic, helped generate dozens of new jobs and businesses, and supported skill-building and economic development in Sacramento's manufacturing and creative economy.

In 2021, Sacramento-area workforce trainees and entrepreneurs checked in 10,057 times to use Hacker Lab space, tools & equipment as a critical resource amid COVID-19 challenges. This included 989 classes, events & meetups where attendees gained workforce-focused skills in fields such as advanced manufacturing, CNC design, woodshop, welding, 3D printing, and more. The Hacker Lab Pathways scholarship provided curriculum to 473 attendees, 55 percent of which explored a new field and 22.5 percent of which started new businesses. The MAKEHERS women business accelerator graduated 30 Sacramento-based women and non-binary business owners across two cohorts with targeted programming for participants from low-income backgrounds and funded \$30,000 in seed investments. Finally, the Maker-to-Market program served entrepreneur training to 555 attendants and helped over 36 small businesses launch, creating economic resiliency amidst COVID-19.

InnoGrove continued to offer virtual networking and educational workshops focused on startup and small business development, hosting 10 events and reaching 240 attendees. This included Women-in-Tech Workshops to support the growth of women in technology careers and businesses as well as Startup Founder Workshops. InnoGrove also laid the foundation for the InnoGrove Startup Resource Directory (IRSD), which will be comprised of professionals in a range of industries who have agreed to assist small and startup companies affiliated with InnoGrove with their business-related questions.

StartupSac accelerates Sacramento's startup and innovation ecosystem through educating, empowering and connecting startups to founders and innovators, and continued to connect and engage in 2021 despite the continued impacts of the pandemic. This included two Mentor

Sacramento Office Hours Sprints, a program offered in collaboration with the Carlsen Center which matched over 75 early-stage entrepreneurs with expert mentors, investors, advisors, subject matter experts, and experienced entrepreneurs in three, 15-minute sprint sessions each. StartupSac also launched Scale-Up! Workshops, educating 25 entrepreneurs about essential deal terms of equity investments, as well as an Angel Investing series to show how activating more angel investors in our region can benefit local startups and the Greater Sacramento economy. Startup Sac held a total of 24 events, supporting 789 businesses, including nine StartupSac Happy Hour Events featuring 17 veteran founders and 317 attendees, and holding 10 Startup Sac Office Hours with a total of 281 attendees.

SMUD sponsored the Entrepreneurs Showcase's **Impact'21 Global Venture Summit**, a day-long exhibition focused on innovation and investment in leading technologies, including artificial intelligence, cyber security, autonomous vehicles and more. More than 20 exhibitors provided previews and demonstrations of innovative solutions. As part of the Summit program, SMUD's Chief Zero Carbon Officer, Lora Anguay, spoke on a zero-carbon themed panel.

SMUD initiated a new partnership with **Growth Factory**, a nonprofit pre-seed accelerator and accompanying venture fund on a mission to scale truly great companies in the Greater Sacramento region. Growth Factory will foster 25 startup companies per year, providing mentorship and guidance to each along the pathway from founder to CEO. SMUD will supply thought leadership throughout the programming, particularly in areas of clean tech and operational excellence.

SMUD also sponsored FourthWave, a local accelerator program for women-led technology, which works in collaboration with the CSUS Carlsen Center for Innovation & Entrepreneurship.

Commitment to Low Rates: SMUD continues to maintain rates that are below PG&E's, both at a system level and by rate class.

Figure 1: Compares SMUD and PG&E system average rates for the past two years. On a system average basis, SMUD's system average rates have averaged 31.3% below PG&E's since 2012.

Customer		Rate Categories		Average Annual Rate		Difference	Difference
				PG&E	SMUD	Below PG&E*	Below PG&E*
Class	Description	PG&E	SMUD	2021	2021	2021	2020
Residential	Standard	E-1	R-TOD	\$0.2859	\$0.1700	-40.5%	-37.5%
	Low Income	CARE***	EAPR & EAPRMED**	\$0.1792	\$0.1183	-34.0%	-28.8%
All Residential				\$0.2483	\$0.1605	-35.4%	-31.0%
Small Commercial****	<= 20 kW	B-1	GFN/GSN_T	\$0.2804	\$0.1659	-40.8%	-41.8%
	21 - 299 kW	B-6	GSS_T	\$0.2614	\$0.1534	-41.3%	-43.3%
Medium Commercial****	300 - 499 kW	B-10	TOU-3	\$0.2439	\$0.1421	-41.7%	-43.6%
	500 - 999 kW	B-19	TOU-2	\$0.2102	\$0.1328	-36.8%	-39.4%
Large Commercial****	=> 1 MW	B-20	TOU-1	\$0.1602	\$0.1097	-31.5%	-35.8%
Lighting	Traffic Signals	TC-1	TS	\$0.2643	\$0.1312	-50.4%	-51.9%
	Street Lighting	various	SLS,NLGT	\$0.3031	\$0.1590	-47.5%	-51.2%
Agriculture	Ag & Pumping	AG	ASN/D,AON/D	\$0.2521	\$0.1463	-41.9%	-44.8%
System Average				\$0.2336	\$0.1472	-37.0%	-35.7%

Notes:

* Projected 2021 average prices for SMUD with rates effective 01-01-21 and 10-01-21. PG&E average prices in 2021 reflect rates effective 12/01/21, per Advice Letter 6415-E. The rate difference in year 2020 reflects PG&E average rates as of 10/1/20, per Advice Letter 5958-E dated 9/21/20, and SMUD rates effective 01-01-20 and 10-01-20.

** CARE vs EAPR includes EAPR & EAPRMED customers.

*** There is no indication from PG&E that their CARE rates include customers who have a medical allowance only.

**** Commercial rates include WAPA credits.

Figure 1 shows that rate competitiveness varies by customer class and is at least 31.5% below comparable PG&E class average rates. Since the creation of the annual rate monitoring report in 2007, SMUD has consistently maintained rates that were more than 18% below PG&E.

APPENDIX B

SMUD shall align its economic development activities with regional economic development initiatives.

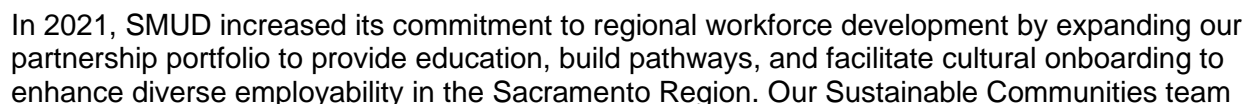
Leadership Roles: Throughout 2021, SMUD staff held visible leadership roles in regional economic development initiatives and organizations, helping ensure regional stakeholders are working in concert on business development, attraction, retention and expansion efforts and that our efforts are aligned with regional priorities. SMUD's leadership roles in regional economic development organizations included:

- Business Council for Sustainable Energy, Board of Directors
- Business Environmental Resource Center, Advisory Committee
- Carmichael Chamber of Commerce, Board President
- California Electric Transportation Coalition, Board of Directors
- California Mobility Center, Board of Directors
- California Workforce Development Board, Board of Directors
- Capital Region Small Business Development Center, Advisory Board
- Cleaner Air Partnership, Executive Committee
- Downtown Sacramento Partnership, Board of Directors
- Electric Transportation Community Development Corporation, Board of Directors
- Folsom Tourism and Economic Development Corporation, Board of Directors
- Greater Sacramento Economic Council, Board of Directors
- Greater Sacramento Economic Council, Economic Development Directors Taskforce
- Greater Sacramento Urban League, Board of Directors
- Hacker Lab, Board of Directors
- Internal Study Mission, Steering Committee
- Metro EDGE, Leadership Council
- Midtown Business Association, Board of Directors
- National Association of Workforce Boards, Board of Directors
- National Association of Women Business Owners, Board of Directors
- North State Building Industry Association, Board of Directors
- North Sacramento Chamber of Commerce, Board of Directors
- Power Inn Alliance, Board President
- Project Attain, Board of Directors
- R Street Sacramento Partnership, Board of Directors
- Sacramento Asian Pacific Chamber of Commerce, Board of Directors
- Sacramento Black Chamber of Commerce, Board of Directors
- Sacramento Employment and Training Agency (SETA)/Sac Works, Board of Directors
- Sacramento Employment and Training Agency, Board of Directors
- Sacramento Hispanic Chamber of Commerce, Board of Directors
- Sacramento Metro Chamber of Commerce, Executive Committee
- Sacramento Metro Chamber, Economic Development Policy Committee Co-Chair
- State Sprint, Steering Committee
- The River District, Board of Directors

- Sustainable Communities Program:** Our Sustainable Communities program helps bring environmental equity and economic vitality to all communities in our service area, with special attention given to historically under-resourced neighborhoods. We believe in the ability to make a greater collective community impact through partnerships, and collaborate with private industry, government agencies and nonprofits to invest in and implement programs that provide equitable access to indicators of sustainable community success, with a focus on social wellbeing, healthy environment, prosperous economy, and mobility.

Involvement of all our communities is foundational to our 2030 Zero Carbon plan. SMUD recognizes the importance of partnering with all the communities we serve. We commit to reaching impacted communities as we work toward our goal of zero carbon.

SMUD's Sustainable Communities Priority Map: Our Sustainable Communities Resource Priorities Map helps analyze current data to indicate the local areas most likely to be underserved or in distress by lack of community development, income, housing, employment opportunities, transportation, medical treatment, nutrition, education, and clean environment. The data sets highlighted in the Resource Priorities Map include key indicators that would best aid in identifying and targeting communities with a greater sensitivity to social, economic, and environmental issues.



has continued to strengthen our support of these partners by leveraging resources and opportunities that help increase awareness and access to livable wage jobs for under resourced communities. We linked California Mobility Center with several nonprofit partners, including Women's Empowerment, Single Mom Strong, so they could increase awareness of advanced manufacturing careers to women who often don't consider this career field. Additionally, we provided new and refurbished laptops for Butte County Office of Education (Sacramento location) and ACC Senior Center to support equitable access to training and job opportunities.

Building off the success of its inaugural "Energy Careers Pathways" solar training class, SMUD launched a new Energy Careers Pathways training in 2021 in partnership with Grid Alternatives. The workforce program recruits individuals from Sustainable Communities target neighborhoods and provides them four weeks of paid instruction; two weeks of online learning and two weeks of in-person instruction in a hands-on, safe format. Upon graduation, participants are matched with potential employers to demonstrate what they've learned by showcasing conduit bending, wired J-boxes, and more. Importantly, while the focus is on solar installation, students also learn about the installation and importance of battery storage and EV charging infrastructure. The new program closed the year with a total of 196 program applicants, 93 participants completing the initial 2-week online training, 52 participants completing the subsequent 2 week in-person training, and 28 job placements. The program continues in 2022 with a completely in-person format and a renewed focus on EV and electrification infrastructure installation.

Shine Program: In its fifth year, the Shine program invests in local nonprofit partners that execute inclusive and equitable projects through collaborations and partnerships supporting our historically under-resourced communities. In 2021, 94 organizations submitted applications with compelling and competitive projects. We received requests for over \$3.2 million in funding for projects to improve access to workforce development trainings, STEM education, energy efficiency and revitalizing neighborhoods. Shine will fund 36 projects totaling \$650,000. With a diverse and inclusive set of deliverables supporting our under resourced communities, the Shine partners impact include energy efficiency in buildings serving seniors, veterans and individuals with disabilities, improved walkability with ADA accessibility along Tillotson Parkway, workforce development skills training with cultural relevance for recent Afghan refugee community, youth development in civic leadership/career exploration and multiple Crime Prevention Through Environmental Design projects in partnership with our local Property Business Improvement Districts.

Our Community Resource Liaison (CRL) program is a loaned SMUD employee program that supports key chamber and nonprofit partners, as well as an employee training opportunity, for up to 12 months. CRLs are responsible for managing and implementing innovative strategies to support businesses, increase membership participation and foster community impact by creating opportunities that promote the partners' operations as well as SMUD's programs and services. Six community partners participated in the CRL program in 2021: the Sacramento Hispanic Chamber of Commerce, the Sacramento Black Chamber, the Sacramento Rainbow Chamber, the Rancho Cordova Chamber, the City of Refuge, and the Minority Business Assistance Recovery Kickstart Program (MBARK). SMUD's investment through the CRL Program enhanced these organizations' ability to implement new services, design and develop new programs, extend and increase current program offerings and enhance community engagement by expanding their reach. To date, five (5) of the 11 CRLs have been promoted within SMUD during or following their work in the CRL program. SMUD also provided direct staff technical, marketing, communications, and administrative support to the Carmichael Chamber and GSEC.

COVID-19 Small and Midsize Business Support: 2021 was the second year of the COVID-19 global pandemic. Our small and mid-size businesses continued to work through state-enforced

mandates, and continued to struggle to pivot their businesses. There were added challenges in 2021, including supply chain delays/shortages and employee retention challenges.

The SMUD Small and Mid-size Business (SMB) Team continued to keep customer safety at the forefront as they virtually assisted customers and provided the personalized level of service our customers expect from SMUD. In 2021, the SMB team of Strategic Account Advisors (SAA) continued to develop and promote on-line resources for customers. Building on the 2020 launch of “explainer video’s,” we released the “You have control with SMUD MyAccount” and “Commercial Rate Restructure - What you should know,” videos.

The SMB team worked closely with program managers at SMUD to “re-design” the Complete Energy Solutions program to be small business friendly. The re-designed program is more encompassing, with a financing option not previously available. Throughout 2021, SMB customers continued to take advantage of a variety of SMUD incentive programs, including Express Energy Solutions, Complete Energy Solutions and the Custom Incentive Program.

Our SMUD “Here to Help” campaign continued in 2021 delivering resources to help our business customers during the pandemic.

Key executions under the “Here to Help” campaign included:

- SMUD.org/BizResources – We continued to promote the BizResources landing page featuring local, state and national business resources
- “We are in this together” social media - promoting small and mid-size business SMUD “partnership” stories through social media outlets
- SMB Strategic Account Advisor awareness campaign - targeted digital, audio + streaming to alert small & midsize businesses they had a personal contact at SMUD to assist them
- Virtual Energy Assessment – SAA’s continued to offer online energy assessments, prioritizing safety of customers
- Meet the Buyers & Business Resource Expo – SMUD virtual expo had a successful second year with opening sessions that included greetings from SMUD Directors and Board members. The Business Resource Expo continued to promote doing business with SMUD but also educated our customers on new technologies and programs offered by SMUD
- You Have Control with SMUD MyAccount video– alerting customers to the many features within SMUD MyAccount that can help customers understand and control their energy usage
- Commercial Rate Restructure: What You Should Know video – preparing customers for the upcoming Q4 rate restructure transition; why it was occurring and what customers could expect

The “Here to Help” Campaign addressed the following:

- Proactively informing our business community about COVID-19 resources and related information
- Raising customer awareness that their Strategic Account Advisor (i.e., primary account manager), is available to support and assist
- Development of new business customer digital tools
- Increasing awareness of the availability of digital tools
- For the safety of our employees and our community, shifted education and advisory services from in-person to digital platforms
- Reinforcing our mission that “we are all in this together”

APPENDIX C

SMUD shall assist in retaining, recruiting and growing commercial and industrial rate-paying customers.

Projects announced in 2021 include seven new companies creating 442 new jobs:

- [LYT.ai](#) – Mobility startup with 15 new jobs in the region
- [One Finance](#) – Financial Tech (50 jobs) - wellbeing is our mission.
- Pluto – Bio-Life science (confidential – 230 jobs)
- [QPQ](#) – International Tech expansion to Folsom (IT network infrastructure to enable a digital universe) - 15 jobs
- [Kubota Tractor](#) – Manufacturing in Elk Grove (125 jobs with planned expansion)
- [Humanly](#) – Unified conversation AI technology for recruiting/screening platform - 5 jobs
- [CENTRL](#) – Co-working/Flexible workspaces expansion from Oregon to California

Commercial Development: In 2021, our Commercial Development team actively engaged with approximately 225 commercial, mixed-use and residential project developers throughout our service area. Highlights include:

- Strategic outreach on SMUD bundled programs to developers and builders.
- Managing the Statewide Community Infrastructure Program (SCIP) which allows development projects to levy property taxes to finance eligible infrastructure expenses, including two acquisition agreements for SMUD Fees and Infrastructure.
- Distribution of “Developer Connections” e-newsletters, with a 25%+ open and read rate.
- Began SMUD’s Central City 21kV extension plan to support future development projects currently under construction with an estimated completion of 2022.

Central City Growth: The Central City continued to see sustained growth in 2021, especially focused on single- and multi-family development. Development projects located in the Central City face unique challenges based on space constraints and increases in high density development. 17Central located at the former Sacramento Ballet building kicked off construction by D&S Development, which consists of 107 units and ground floor retail. The California Fruit Building is scheduled to finish construction of a boutique hotel in a historic building close to the Golden 1 Center and is expected to begin taking reservations in 2021. The Mansion Inn project began construction adjacent to the California Governor’s Mansion, consisting of 190 units and ground floor retail. The project is anticipated to be completed in late 2021. 1430 Q Street, the mixed-use project adjacent to the lively R Street corridor, completed construction and began occupying rental units. The Fort Sutter Hotel completed construction of their midtown hotel in 2020, near the Sutter Medical Complex in midtown and began formally taking reservations in early 2021. New construction and significant building renovations continued to be robust in 2020; at the close of the year, over 92 development projects or significant building renovation projects were being coordinated by SMUD’s Commercial Development team within the central city zone, which covers roughly seven square miles.

SMUD continued its coordination efforts with UC Davis’ Medical Center Campus expansion to support the planned replacement hospital tower and ambulatory surgical center Aggie Square, the region’s first innovation hub with over 1 million square feet of research, wet labs, commercial space and housing. The development models Atlanta’s Tech Square aimed at attracting top talent, innovation and companies.

2021 continued the substantial growth for development north of downtown. At Metro Air Park, NorthPoint Development LLC, based out of Kansas City, Missouri, completed construction of a 1.3 million square foot Amazon distribution facility in 2021. NorthPoint has 3 additional buildings under construction as of late 2021. Buzz Oates has 6 buildings under construction as of late

2021. SMUD has received eight new SMUD Rule 16 applications for new buildings that are anticipated to begin construction in 2021 at Metro Air Park. It is anticipated that the development will be 40% built out by the end of 2022. North Lake master plan at Hwy 99 and W. Elkhorn Blvd (formerly Greenbriar) continues robust development, as the developer is commencing construction of the phase two portion of the project. At buildout, North Lake will have over 2,100 residential units. SMUD has significant infrastructure planned for North Lake and Metro Air Park and is working to extend 69kV facilities in the area to support four new substations. At completion, the substations will equate to 250MW of new capacity in the area to accommodate future growth.

In Folsom South, residential construction is well underway and is projected to bring over 11,000 new housing units over several years. Major builders such as Toll Brothers, Lennar, KB Home, Richmond American, The New Home Company have completed their initial subdivisions. Two new medical campuses and a new high school are planned for the area and SMUD staff worked closely with their teams in 2021 in planning for facilities to serve the initial load requirements.

Rancho Cordova continues to be one of the fastest growing in the region. SMUD staff worked closely with developers in the Rio Del Oro development with its initial subdivision and two significant industrial customers. KHovnanian broke ground on its first phase and is planning to go All-Electric. In Elk Grove, SMUD worked with City Staff on the Southeast Industrial Area (SEIA) in providing input into a supplemental environmental impact report to include SMUD needs to serve the development. The SEIA Project involves the annexation of up to 571 acres into the City of Elk Grove from unincorporated Sacramento County and the development of this area with a range of industrial and commercial uses. The annexation is taking place in phases. The first phase occurred in June 2021 and covers approximately 390 acres (referred to as the Phase 1 Annexation). To accomplish this, the Project included amendments to the City General Plan, the adoption of Prezoning, adoption of a Specific Plan, and the establishment of infrastructure master plans addressing public water, sewer, drainage, and transportation.

In addition, the Commercial Development team worked closely in numerous, high-profile and critical projects to the community including transitional, low-income, and supportive housing such as St. Anton Communities and WEAVE. Transformational projects such as the Railyards, the Department of General Services' Richards Boulevard Office Complex, and multiple master plan residential projects. Development projects include Folsom South, Barrett Ranch, and on additional infrastructure coordination to support development in Rio del Oro, the Sunridge Specific Plan Area along Douglas Road and Sunrise Blvd in Rancho Cordova.

Indoor Cultivation: The Customer Experience Delivery team turned to technology again in 2021 to realize another successful year supporting SMUD's existing and future indoor cultivation customers. As an essential business, the cannabis industry continued to grow its presence in SMUD's territory as evidenced by an 85% increase in revenue directly correlated to the increase in facilities coming online exceeding \$17 million in 2021.

2021 marked the third year of SMUD's partnership with the Greater Sacramento Urban League's Cannabis Opportunity Reinvestment and Equity (CORE) program. The purpose of this program is to provide equitable access to the cannabis industry through education and training. Members of the program receive support and guidance in developing their facilities. They are taught best practices in using energy efficiently and how to take advantage of SMUD's resources including energy efficiency incentives, program resources, and a dedicated Strategic Account Advisor to provide ongoing support and direction. We have now presented to over 60 graduates and continue to support those adversely affected by the disproportionate enforcement of cannabis regulation. As a result of the program, participants have been provided

the education, tools, and support required to build successful businesses in the cannabis industry ranging from multi-faceted incubator facilities to the brick-and-mortar dispensaries.

APPENDIX D

SMUD shall offer economic development rates and program incentives.

SMUD offers economic incentives to help attract new businesses and expand existing ones to grow the regional economy. Incentives range from helping design new construction to offering energy-efficient upgrades for equipment to proposing our Economic Development Rate (EDR).

Economic Development Rate: Customers that exceed 299kW for three consecutive months may qualify for the EDR. This rate has multiple options for our customers, including a frontloaded rate to help reduce initial operating costs, or a fixed discount over the ten-year period. Customers who locate in a disadvantaged community have the same options, but with a larger discount. Additionally, an economic impact study is performed by the Greater Sacramento Economic Council. This ensures the customer is aware of other economic development programs and incentives.

Size	Term	Industry Requirements	Job Requirements	Full Service Requirement	Discount
300kW+	10 years	No limitations	No minimum requirement	No	<p>Two options for customers to choose:</p> <p>Standard EDR <u>Opt A:</u> 6% for years 1-5, declining 1% per year for years 6-10 <u>Opt B:</u> 4.5% for 10 years</p> <p>Rate for Disadvantaged Communities <u>Opt A:</u> 8% for years 1-5, declining 1.5% per year for years 6-10 <u>Opt B:</u> 6% for 10 years</p>

Program Incentives: SMUD offered energy efficiency and electrification incentives to help meet the financial responsibility goals and growing sustainability needs of our commercial customers. Our programs offered incentives to help customers install new energy-saving equipment and make energy efficiency and electrification modifications to their buildings. The effort is part of SMUD's goal to achieve 100% net-zero-carbon by 2030. Incentives offered included but are not exclusive of, energy efficient heating and cooling, domestic hot water, induction cooking, and vehicle electrification, among many others.

Overall, we provided incentives to 363 commercial customers for a combined total program energy savings of 10.71 GWh.

APPENDIX E

SMUD shall offer a contracting program for certified small businesses who are rate-paying customers.

In 2021, we exceeded our SEED Program goal of awarding at least 20% of all contracts to certified small businesses. Specifically, we awarded 23% through over 100 SEED contracts totaling approximately \$48 million.

Award Type	2021		
	Total PO \$	PO Count	Program %
SEED Prime	\$ 49,274,589.85	30	66%

SEED Sub-Contractors	\$ 23,479,105.71	0	31%
Sheltered Market	\$ 1,243,558.89	10	2%
Exempt	\$661,328.31	82	1%
Grand Total	\$48,000,000	122	100%

Note: The acronym PO refers to "Purchase Orders."

The SEED team focused its efforts on the following key outreach initiatives:

- **Availability Study:** The Availability Study, a service area business census of vendors likely to do business with SMUD, was completed in 2021. Study data was overlaid onto the Resource Map to inform strategy, outreach and resource allocation to engage businesses in contracting opportunities and remove obstacles for under-resourced communities interested in doing business with SMUD.
- **Business Advisory Committee (BAC):** SEED hosted four quarterly meetings in 2021 for BAC business organization leaders, raising awareness about the SEED program, the 2030 Zero Carbon Plan, best practices, sponsored events, incentives, commercial programs and contracts awarded to BAC members' constituents.
- **How to Do Business with SMUD:** The SEED team used virtual formats and collaborated with community partners to deliver 10 educational workshops on SMUD's procurement program and promote SEED participation opportunities. In 2021, the team delivered the first workshop in Spanish language to the Sacramento Hispanic Chamber of Commerce's Emprende cohort.
- **"Meet the Buyers" Conference:** SEED's 10th Annual Meet the Buyers Conference pivoted to a virtual conference format. SEED partnered with the SMB team to expand the event to the Meet the Buyers & Business Resource Expo and included commercial program/resource information. The successful event drew a record 424 registrants, offering 13 panel sessions and education workshops, over 25 speakers and 15 virtual exhibitors. The event was very well-received, with survey results confirming a 100% "met or exceeded expectations" event satisfaction level.
- **SEED Ambassador Program:** The program engages designated employees within SMUD business units in promoting the use of SEED vendors in their workgroup's contracting activities. The program has over 35 participants and continues to see more referrals from employees, who have also been active in Meet the Buyers and Business Advisory Committee meetings.
- **Sheltered Market Initiatives:** The SEED team continually explores innovative ways to foster small business participation in solicitations and worked closely with Supply Chain to identify 6 sheltered market contracting opportunities in the areas of commodities and professional services. The contracts are specific only to verified SEED vendors and totaled approximately \$377,000.
- **SEED Quarterly Newsletter:** The SEED team distributed over 572 electronic copies of the quarterly newsletter to external partners and SEED Ambassadors to highlight SEED program resources and contracting opportunities. It features information including free government contracting services, SEED supplier success stories, recent contract awards, upcoming bid opportunities, and small business events and workshops, and it is also available on smud.org.
- **Procurement Platform Transition to Ariba:** The SEED team continued to collaborate with Procurement to support the evolution of the Ariba platform, addressing and identifying solutions for supplier experience and enhancements, as well as providing training to local small businesses.

RESOLUTION NO. 22-10-08

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

This Board accepts the monitoring report for **Strategic Direction**
SD-14, System Enhancement, substantially in the form set forth in **Attachment**
E hereto and made a part hereof.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: October 5, 2022

FROM: Claire Rogers *CR 10/5/22*

SUBJECT: Audit Report No. 28007428
Board Monitoring Report; SD-14: System Enhancement

Audit and Quality Services (AQS) received the SD-14 *System Enhancement* 2021 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.

CC:

Paul Lau

Board Monitoring Report 2021

SD-14, System Enhancement



1) Background

Strategic Direction 14, the System Enhancement Board policy states that:

As a community-owned utility, SMUD recognizes that the relocation or underground placement of primary voltage power lines may be desirable to local jurisdictions to improve aesthetics, economic vitality, safety and disabled access. Therefore, it is a key value of SMUD to make selected distribution system enhancements, such as permanent relocation or underground placement of primary power lines below 69 kV.

- a) SMUD will, at its expense and where technically feasible, permanently relocate or underground existing overhead distribution facilities provided the governing body of the city or county in which the electric facilities are and will be located has:
 - i) Identified, after consultation with SMUD, a specific system enhancement project;
 - ii) Determined the project is in the public interest;
 - iii) Ensured all existing overhead communication facilities related to the project will also be permanently relocated or placed underground;
 - iv) Obtained and provided SMUD with all easements necessary for the project.
- b) After achievement of core financial targets, SMUD will annually commit up to one-half of one percent of its annual gross electric sales revenue to system enhancements. The proposed projects will be subject to SMUD's annual budget approval process, and uncommitted funds from any given year will not be carried over to future years. Funding will be assigned to projects brought forward by local cities or counties based on applying the following criteria (not in order of preference):
 - i) Project scale and/or cost when measured against available District resources.
 - ii) Requesting entity has developed full scope, obtained all necessary easements, and development plan for customer service conversion from overhead to underground, as required.
 - iii) Extent to which the costs are borne by others.

2) Executive summary

SD-14 states that SMUD “*will annually commit up to one-half of one percent of its annual gross electric sales revenue to system enhancements.*” However, as a result of SMUD’s financial challenges caused by the COVID-19 pandemic, on June 9, 2020 the Board of Directors approved suspension of funding *new* projects under SD-14 for 2020, 2021 and 2022 (Resolution 20-06-03). Previously committed projects (a total of four) under the Policy continued to be funded during these years.

SMUD is in compliance with SD-14, System Enhancement.

The planning and execution of SD-14 projects is typically a multi-year process that starts with a preliminary work scope that is used to determine a ballpark cost estimate, to the finalization of the work scope that includes a detailed design and detailed cost estimate. After necessary permits and easements are obtained, the project is released for execution/construction. Tables 1 and 2 below show the committed projects and their status in 2021. The budget for these four multi-year projects were included in the approved operational plans and budgets.

Table 1: Committed projects completed in 2021

Local Jurisdiction	Project Title	Total Cost Estimate ^(a)	2021 Project Budget	2021 Project Spend	Project Status
Sacramento County	Fair Oaks Blvd Landis to Angelina (0.3 mile)	\$361K	\$0K ^(b)	\$82K	completed in Q1 2021
Sacramento County	Hazel Avenue Phase 3 Sunset to Madison (0.7 mile)	\$1,443K	\$1,153K	\$1,138K	completed in 2021

(a) Cost estimate is based on the detailed design.

(b) The original schedule called for the project to be completed by the end of 2020. Some work carried over into Q1 2021.

Table 2: Committed projects with preliminary work scope

Local Jurisdiction	Project Title	Ballpark Cost Estimate	2021 Project Budget	2021 Project Spend	Project Status
Citrus Heights	Auburn Blvd. Rusch Park to I-80 (0.75 mile)	\$2,500K	\$0	\$3.3K	2024 planned construction start date
Elk Grove	Elk Grove Blvd b/w Waterman & School Streets (~0.5 mile)	\$1,000K	\$81K	\$0.7K	2024 planned construction start date

Mitigation of poles located on sidewalks

Staff researched and evaluated options to help local agencies mitigate the impact of poles that are located on sidewalks. This effort included a review of existing intake processes for local agency projects as well as meeting with representatives from Sacramento County, Citrus Heights, Elk Grove, Folsom, Rancho Cordova, and the City of Sacramento to discuss SMUD's SD-14 program. The purpose of the meetings was to elicit thoughts from local agency staff on how the SD-14 program could be made more usable.

The process moving forward

Customer inquiries/concerns regarding poles on sidewalks will continue to be referred to and handled by the local agencies who are the responsible entities and subject matter experts for sidewalk design, maintenance, and condition evaluation.

To help local agency staff identify and prioritize locations for the agencies' potential sidewalk maintenance or streetscape improvement projects, SMUD will annually prepare maps of commercial corridors with overhead lines and share these maps with the local agencies, as suggested during our meetings with them. The maps, which will show locations of SMUD's poles, could also be used as a reference for other capital improvement projects to help improve project planning and coordination.

As part of ongoing education efforts, SMUD staff will also meet with new local agency staff to educate them about SMUD's SD-14 program and how they can leverage our program to mitigate the impact of poles and sidewalks.

Finally, SD-14 requires the local agencies to provide a public utility easement for newly underground electrical lines to ensure SMUD is not responsible for future relocation costs and has the necessary right for future maintenance. However, feedback from local agencies is that easement acquisition can be a challenge in areas where there may not be sufficient space. To overcome this challenge, SMUD staff will continue exploring custom agreements with local agencies that govern future financial obligations for relocation when SMUD's facilities remain in the road right-of-way.

3) Additional supporting information

Since the adoption of the SD-14 policy, eleven projects have been funded through the policy for a total of \$12.04 million. Table 3 below lists the projects completed by year.

Table 3: Completed Projects Since Policy Adoption

Local Jurisdiction	Project Description	SMUD Construction Completion	SMUD Project Cost
Sacramento County	Fair Oaks Blvd Landis to Angelina (0.3 mile)	2021	\$0.25 M
Sacramento County	Hazel Avenue Phase 3 Sunset to Madison (0.7 mile)	2021	\$1.2 M
City of Sacramento	Sutter Village (~200 feet)	2019	\$0.12 M
City of Sacramento	Ice Blocks Project R Street b/w 16th & 18th Streets (1,000 ft.)	2017	\$0.47 M
Sacramento County	Hazel Avenue Phase 2 b/w Curragh Downs & Sunset Ave. (1 mile)	2017	\$2.3 M
Sacramento County	Fair Oaks Blvd. b/w Landis Ave. & Engle Rd. (0.5 mile)	2016	\$1.2 M
City of Sacramento	16th and O Streets (1,000 ft.)	2013	\$0.3 M

Citrus Heights	Auburn Blvd. b/w Sylvan Corners & Rusch Park (1 mile)	2013	\$2.6 M
Sacramento County	North Highlands Town Ctr. at Watt Ave. & Freedom Park Dr. (0.5 mile)	2012	\$1.1 M
City of Sacramento	7th St. b/w North B & Richards Blvd. (1,500 ft.)	2012	\$1.3 M
City of Sacramento	Richards Blvd. b/w North 5th & North 7th Streets (1,000 ft.)	2012	\$1.2 M

Total: \$12.04 M

4) Challenges

There were no challenges encountered with the implementation of the Board policy in 2021.

5) Recommendation

It is recommended that the Board accept the 2021 Monitoring Report for SD-14, System Enhancement.

RESOLUTION NO. 22-10-09

WHEREAS, by Resolution No. 21-12-10, adopted December 9, 2021, this Board approved the **2022 Budget Resolution**, including a line item expenditure for \$440,680,590 for Commodity – purchased power, fuel, and wheeling; and

WHEREAS, there is now a need to augment the SMUD 2022 Budget, which will increase the line item expenditure for Commodity – purchased power, fuel, and wheeling by \$309,319,410; **NOW, THEREFORE**,

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

Section 1. Section 2. of Resolution No. 21-12-10 is hereby amended to increase the funds budgeted for the line item for Commodity – purchased power, fuel, and wheeling to increase the 2022 Commodity – purchased power, fuel, and wheeling budget to \$750,000,000.

Section 2. In all other respects, the **2022 Budget Resolution** is reaffirmed.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

RESOLUTION NO. 22-10-10

WHEREAS, by Resolution No. 16-05-08, adopted on May 19, 2016, this Board authorized the Chief Executive Officer and General Manager to award contract(s) for fleet fuel card program services (**Fleet Fuel Card Program Contract No. 4500097459**) and for fleet bulk fuel services (**Fleet Bulk Fuel Contract No. 4600001005**) (collectively, the **Contracts**) to **Ramos Oil Company Inc. (Ramos)** in the aggregate amount of \$10 million for a three-year period from June 1, 2016, to May 31, 2019; and

WHEREAS, Contract Change No. 1 to the **Contracts** extended the expiration date to January 31, 2020; and

WHEREAS, Contract Change No. 2 to the **Contracts** extended the expiration date to January 31, 2021; and

WHEREAS, Contract Change No. 3 to the **Fleet Fuel Card Program Contract No. 4500097459** increased that contract by \$1 million; and

WHEREAS, Contract Change No. 3 to the **Fleet Bulk Fuel Contract No. 4600001005** increased that contract by \$3.8 million and extended the expiration date to December 31, 2024; and

WHEREAS, Contract Change No. 4 to the **Fleet Fuel Card Program Contract No. 4500097459** increased that contract by \$1.2 million and extended the expiration date to December 31, 2024; and

WHEREAS, by Resolution No. 16-12-18, adopted on December 15, 2016, this Board raised the limit for operational inventory and non-inventory materials under **Board-Staff Linkage BL-8, Delegation to the Chief Executive Officer and General Manager (BL-8)** from \$5 million and \$3 million, respectively, each to \$8 million, and Contract Change No. 3 to the **Fleet Bulk Fuel Contract No. 4600001005** and Contract Change No. 4 to the **Fleet Fuel Card Program Contract No. 4500097459** were executed in compliance with the delegated authority of the Director, Procurement, Warehouse & Fleet; and

WHEREAS, increasing the aggregate amount for the **Contracts** will ensure continuity while maintaining cost control mechanisms that constantly align with market fuel rates; **NOW, THEREFORE**,

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

Section 1. That this Board hereby authorizes the Chief Executive Officer and General Manager, or his designee, to increase the aggregate contract not-to-exceed amount by \$12,481,000, from \$16 million to \$28.48 million, for Contract No. 4500097459 for fleet fuel card program services (**Fleet Fuel Card Program Contract**) and Contract No. 4600001005 for fleet bulk fuel services (**Fleet Bulk Fuel Contract**) (collectively, the **Contracts**) with **Ramos Oil Company Inc.**

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 **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: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

RESOLUTION NO. 22-10-11

WHEREAS, by Resolution No. 21-03-06, adopted on March 18, 2021, this Board authorized the Chief Executive Officer and General Manager to award Contract No. 4600001474 to **Hot Line Construction, Inc. (Hot Line Contract)** and Contract No. 4600001475 to **Mountain G Enterprises (Mountain G Contract)** (collectively, the **Contracts**) 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 million; and

WHEREAS, Contract Change No. 1 to the **Hot Line Contract** increased rates by 7.14%, 5.44% of which accounted for labor and 1.7% for increased fuel costs; and

WHEREAS, Contract Change No. 1 to the **Mountain G Contract** increased Rate Schedule Part B, Line Items 11 and 12 by approximately 36% and 45%, respectively; and

WHEREAS, Contract Change No. 2 to the **Mountain G Contract** added Supplier Education and Economic Development (SEED) subcontractor WBE Traffic Control Inc. to Exhibit I - Designation of Prime Contractor, Subcontractors and Suppliers to perform traffic control where lane closures and/or night work is required; and

WHEREAS, Contract Change No. 3 to the **Mountain G Contract** increased rates by 5.2% for labor; and

WHEREAS, SMUD has been adversely affected by the labor climate induced by Pacific Gas & Electric (PG&E) and its ongoing commitment to reduce wildfire risk across its service area and the resultant loss of contract crews that supported critical Line Assets programs; and

WHEREAS, increasing the total aggregate amount for the **Contracts** will allow SMUD to augment general line construction work while maintaining flexibility to realign its internal workforce to complete workload;
NOW, THEREFORE,

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

Section 1. That this Board hereby authorizes the Chief Executive Officer and General Manager, or his designee, to increase the aggregate contract not-to-exceed amount for general line constructions services by \$20 million, from \$20 million to \$40 million, for Contract No. 4600001474 with **Hot Line Construction, Inc.** and Contract No. 4600001475 with **Mountain G Enterprises** (collectively, the **Contracts**).

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 **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: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

RESOLUTION NO. 22-10-12

WHEREAS, Contract No. 4600001538 with **TSU-Tree Service Unlimited, Inc.**, Contract No. 4600001539 with **Mountain F. Enterprises, Inc.**, and Contract No. 4600001540 with **The Original Unlimited Tree Service Co.** (collectively, the **Contracts**) were awarded on a competitive basis in November 2021 to provide vegetation management services in SMUD's Transmission Right of Way (ROW) in the **Upper American River Project (UARP)** for the period November 23, 2021, to December 31, 2024, for an aggregate contract not-to-exceed amount of \$8 million; and

WHEREAS, the demand for vegetation management contractors continues to increase with dry weather and is expected to continue through spring; and

WHEREAS, the optimal time for SMUD to perform vegetation management work in the **UARP** is winter for lower elevations and spring for higher elevations; and

WHEREAS, increasing the total aggregate amount for the **Contracts** will allow SMUD to retain qualified vegetation management contractors to complete **UARP** Reservoir Project Wildfire Risk Reduction work at a fair and reasonable price; **NOW, THEREFORE**,

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

Section 1. That this Board hereby authorizes the Chief Executive Officer and General Manager, or his designee, to increase the aggregate contract not-to-exceed amount for **Upper American River Project (UARP)** Reservoir Project Wildfire Risk Reduction services by \$5 million, from \$8 million to \$13 million, for Contract No. 4600001538 with **TSU-Tree Service Unlimited, Inc.**, Contract No. 4600001539 with **Mountain F. Enterprises, Inc.**, and Contract No. 4600001540 with **The Original Unlimited Tree Service Co.** (collectively, the **Contracts**).

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 **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: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

RESOLUTION NO. 22-10-13

WHEREAS, by Resolution No. 18-07-03, adopted July 19, 2018, this Board authorized a contract with **United Health Care Insurance Company (United HealthCare)** to provide administration of SMUD's medical benefits for an initial three-year period from January 1, 2019, to December 31, 2021, to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 19-10-06, adopted October 17, 2019, this Board approved 2020 premiums through December 31, 2020; and

WHEREAS, by Resolution No. 20-09-05, adopted September 17, 2020, this Board approved 2021 premiums through December 31, 2021; and

WHEREAS, by Resolution No. 21-10-06, adopted October 21, 2021, this Board authorized an extension to the **United HealthCare** contract to provide medical benefits for the year 2022 to SMUD employees, retirees and eligible dependents; and

WHEREAS, it would be in SMUD's best interest to extend the medical benefit contract with **United HealthCare** and approve the 2023 premiums through December 31, 2023, because of their distinctive services and relatively lower cost compared to other health plans; **NOW, THEREFORE**,

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

Section 1. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of the SMUD, to approve 2023 medical insurance rates and extend Contract No. 4500110473 with **United Health Care Insurance Company** by one year, for the period January 1, 2023, through December 31, 2023; 2023 cost estimated at \$37.4 million pursuant to the premiums set forth in **Attachment F** hereto and made a part hereof.

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: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

**Attachment F
to Resolution No. 22-10-13**

2023 Active Employees Medical Premium Rates

Active Employees	Basic		
Carrier	Employee Only	Employee + 1	Employee + Family
Kaiser HMO – High Plan	\$712.11	\$1,424.22	\$2,136.33
Kaiser HMO – Low Plan	\$674.53	\$1,349.06	\$2,023.59
United Healthcare Signature Value HMO – High Plan	\$1,196.25	\$2,524.09	\$3,612.68
United Healthcare Signature Value HMO – Low Plan	\$1,075.34	\$2,268.96	\$3,247.58
United Healthcare Signature Alliance HMO – High Plan	\$1,111.76	\$2,345.81	\$3,357.51
United Healthcare Signature Alliance HMO – Low Plan	\$999.39	\$2,108.70	\$3,018.19
United Healthcare High Deductible Health Plan	\$954.14	\$2,013.23	\$2,881.49
United Healthcare PPO Plan	\$1,844.55	\$3,892.01	\$5,570.55

2023 Retiree Medical Premium Rates

Retiree	Basic			Medicare	
Carrier	Retiree Only	Retiree + 1	Retiree + Family	Retiree	Retiree + 1
Kaiser HMO	\$710.20	\$1,420.40	\$2,130.60	\$245.25	\$490.50
Kaiser Medicare Unassigned*	N/A	N/A	N/A	\$1,758.91	\$3,517.82
Kaiser Medicare Part A only**	N/A	N/A	N/A	\$1,348.26	\$2,696.52
United Healthcare Signature Value HMO	\$1,196.25	\$2,524.09	\$3,612.68	N/A	N/A
United Healthcare Signature Alliance HMO	\$1,111.76	\$2,345.81	\$3,357.51	N/A	N/A
United Healthcare PPO – In CA	\$1,844.55	\$3,892.01	\$5,570.55	N/A	N/A
United Healthcare PPO – Out Of CA	\$1,844.55	\$3,892.01	\$5,570.55	N/A	N/A
United Healthcare Medicare Advantage	N/A	N/A	N/A	\$428.88	\$857.76

RESOLUTION NO. 22-10-14

WHEREAS, by Resolution No. 11-09-03, adopted September 1, 2011, this Board authorized a contract with **Kaiser Permanente (Kaiser)** to provide medical benefits for the year 2012 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 12-09-03, adopted September 6, 2012, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2013 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 13-09-04, adopted September 5, 2013, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2014 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 14-08-09, adopted August 21, 2014, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2015 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 15-09-04, adopted September 3, 2015, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2016 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 16-10-03, adopted October 6, 2016, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2017 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 17-09-04, adopted September 21, 2017, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2018 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 18-07-04, adopted July 19, 2018, this Board authorized an extension of the **Kaiser** contract to provide medical

benefits for the year 2019 to SMUD employees, retirees and eligible dependents;
and

WHEREAS, by Resolution No. 19-10-07, adopted October 17, 2019, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2020 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 20-09-06, adopted September 17, 2020, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2021 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 21-10-07, adopted October 21, 2021, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2022 to SMUD employees, retirees and eligible dependents; and

WHEREAS, it would be in SMUD's best interest to extend the medical benefit contract with **Kaiser** and approve the 2023 premiums through December 31, 2023, because of their distinctive services and relatively lower cost compared to other health plans; **NOW, THEREFORE**,

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

Section 1. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of the SMUD, to approve 2023 medical insurance rates and extend Contract No. 4500043215 with **Kaiser Permanente** by one year, for the period January 1, 2023, through December 31, 2023; 2023 cost estimated at \$27.8 million pursuant to the premiums set forth in **Attachment G** hereto and made a part hereof.

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: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

**Attachment G
to Resolution No. 22-10-14**

2023 Active Employees Medical Premium Rates

Active Employees	Basic		
Carrier	Employee Only	Employee + 1	Employee + Family
Kaiser HMO – High Plan	\$712.11	\$1,424.22	\$2,136.33
Kaiser HMO – Low Plan	\$674.53	\$1,349.06	\$2,023.59
United Healthcare Signature Value HMO – High Plan	\$1,196.25	\$2,524.09	\$3,612.68
United Healthcare Signature Value HMO – Low Plan	\$1,075.34	\$2,268.96	\$3,247.58
United Healthcare Signature Alliance HMO – High Plan	\$1,111.76	\$2,345.81	\$3,357.51
United Healthcare Signature Alliance HMO – Low Plan	\$999.39	\$2,108.70	\$3,018.19
United Healthcare High Deductible Health Plan	\$954.14	\$2,013.23	\$2,881.49
United Healthcare PPO Plan	\$1,844.55	\$3,892.01	\$5,570.55

2023 Retiree Medical Premium Rates

Retiree	Basic			Medicare	
Carrier	Retiree Only	Retiree + 1	Retiree + Family	Retiree	Retiree + 1
Kaiser HMO	\$710.20	\$1,420.40	\$2,130.60	\$245.25	\$490.50
Kaiser Medicare Unassigned*	N/A	N/A	N/A	\$1,758.91	\$3,517.82
Kaiser Medicare Part A only**	N/A	N/A	N/A	\$1,348.26	\$2,696.52
United Healthcare Signature Value HMO	\$1,196.25	\$2,524.09	\$3,612.68	N/A	N/A
United Healthcare Signature Alliance HMO	\$1,111.76	\$2,345.81	\$3,357.51	N/A	N/A
United Healthcare PPO – In CA	\$1,844.55	\$3,892.01	\$5,570.55	N/A	N/A
United Healthcare PPO – Out Of CA	\$1,844.55	\$3,892.01	\$5,570.55	N/A	N/A
United Healthcare Medicare Advantage	N/A	N/A	N/A	\$428.88	\$857.76

RESOLUTION NO. 22-10-15

WHEREAS, the **Infrastructure Investment and Jobs Act of 2021 (IIJA)** was signed into law on November 15, 2021; and

WHEREAS, the **IIJA** adds Sections 111(d)(20) and 111(d)(21) to the **Public Utility Regulatory Policies Act of 1978 (PURPA)**, which require SMUD to consider two new proposed federal regulatory standards relating to Demand-Response Practices and Electric Vehicle Charging Programs; **NOW, THEREFORE**,

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

Section 1. SMUD hereby commences consideration of the two new federal regulatory standards set forth in Sections 111(d)(20) and 111(d)(21) of the **Public Utility Regulatory Policies Act of 1978 (PURPA)**.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

RESOLUTION NO. 22-10-16

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

This Board accepts the monitoring report for **Strategic Direction SD-7, Environmental Leadership**, substantially in the form set forth in **Attachment H** hereto and made a part hereof.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: October 5, 2022

FROM: Claire Rogers *CR 10/5/22*

SUBJECT: Audit Report No. 28007431
Board Monitoring Report; SD-7: Environmental Leadership

Audit and Quality Services (AQS) received the SD-7 *Environmental Leadership* 2021 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.

CC:

Paul Lau

Board Monitoring Report 2021

SD-7 Environmental Leadership



1. Background

Strategic Direction 7 ([SD-7](#)), Environmental Leadership states that:

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.

2. Executive Summary

SMUD's focus on environmental leadership is clearly evident in our 2030 Clean Energy Vision and Zero Carbon Plan, but it also includes transparent reporting of GHG emissions, natural resource stewardship and our concerted efforts to make all of our communities more sustainable. This report highlights some of the accomplishments SMUD achieved in 2021 to showcase our commitment to environmental leadership.

We are compliant with the five tenets of SD-7 and our successes include making CDP's (formerly known as the Carbon Disclosure Project) "A- List" for tackling climate change and starting our Land Acknowledgement Statement. A number of our staff and programs received distinguished recognition too, and our efforts are highlighted in the following Appendices: Appendix A (Examples of SMUD Efforts Supporting SD-7), Appendix B (2015-2020 SMUD GHG Emissions Trends), Appendix C (Sustainable Communities), and Appendix D (Acronyms).

3. Additional Supporting Information

2030 Clean Energy Vision and Zero Carbon Plan

For decades, SMUD has been a leader in clean energy and carbon reduction. SMUD's goal to eliminate carbon emissions from our power supply is more ambitious than the already aggressive state mandates and is ahead of virtually all other utilities in the United States. Our 2030 Zero Carbon Plan is a flexible road map to achieve our zero carbon goal while ensuring all customers and communities we serve reap the benefits of decarbonization. Zero carbon emissions bring benefits not only globally, but also locally with reduced emissions GHG emissions, improving local air quality, job creation opportunities, and leadership move away from the use of fossil fuels.

Greenhouse Gas (GHG) Emissions

SMUD is a leader in addressing global climate change and is an active member of The Climate Registry (TCR). SMUD reports its third-party verified GHG emissions to the California Air Resources Board (CARB), TCR and CDP. Staff also reports sulfur hexafluoride (SF₆) emissions and aids with reporting GHG emissions from the Joint Power Authorities (JPAs) to the US Environmental Protection Agency (EPA).

For 2021, GHG emissions were approximately 2.425 million metric tons carbon dioxide equivalent (CO₂e)^[1]. This is an increase of just over 500 thousand metric tons from 2020 emissions; a trend going back to 2015 (which was an especially severe drought year) can be found in Appendix B. Fluctuations in total emissions year-to-year are primarily attributable to hydroelectricity production and natural gas contract rates. Specifically for 2021, amidst historic drought conditions, there was a significant increase in the amount of unspecified power purchased, due to a nearly 900 GWh shortfall in total hydro generation from 2020 to 2021. Another significant driver of emissions was market purchases. In the future, as we purchase greater quantities of lower emissions-intensity power, we can expect those emissions to decrease. Lower hydroelectricity generation leads to higher utilization of SMUD's thermal power plants and increased purchased power leading to higher emissions. Over the past several years, SMUD's efforts to procure power from zero and low-emission sources (e.g., hydro, wind and solar) have resulted in a lower carbon footprint.

A breakdown of emissions by JPAs, and power purchases, with comparisons between 2020 and 2021 can be found in Appendix B.

SMUD uses or supplements the use of biofuels at its thermal power plants to reduce our carbon compliance obligation and we generated approximately 163 GWh of power from biofuels in 2021. Emissions from biofuels are typically considered “carbon-neutral” under several GHG reporting protocols including California's Cap-and-Trade Program.”

CDP

SMUD was recognized for our leadership in corporate sustainability by global environmental non-profit CDP, attaining leadership level for 2 straight years and securing an A- on our 2021 disclosure. SMUD was recognized for its actions to cut greenhouse gas emissions, mitigate climate risks, and develop the low-carbon economy based on reported data. CDP's annual environmental disclosure and scoring process is widely recognized as the gold standard of corporate environmental transparency. Through significant demonstrable action on climate, SMUD is leading on environmental ambition, action, and transparency worldwide.

^[1] The 2020 GHG emissions value represents emissions associated with delivering power to SMUD customers and does not include emissions associated with wholesales into the market. The 2020 emissions from wholesale power are approximately 0.327 million metric tons of CO₂.

Notices of Violation (NOVs)

SMUD and its joint powers authority (JPA) contractor, EthosEnergy, strive to be good corporate citizens and responsible environmental stewards that comply with all local, state, and federal rules and regulations. In 2021, we received no NOVs or similar citations that include civil and/or criminal penalties.

Sustainable Communities

To promote environmental equity as well as inclusive economic and community development, SMUD continues to focus community partnerships, programs, and neighborhood outreach activities in vulnerable and under-resourced communities through its Sustainable Communities program. SMUD has invested over \$11.4 million into this initiative, which takes a boots-on-the-ground approach to tackle issues plaguing our community, while creating an inclusive, clean-energy economy for all communities, with a special emphasis on those in historically under-resourced areas. We rely on grassroots community partnerships and projects to ensure better social well-being, environmental, economic, and mobility outcomes. The goal is to ensure access to an inclusive clean energy future in the Sacramento Region regardless of zip code or socio-economic status by focusing on equitable access to mobility, a prosperous economy, a healthy environment, and social well-being as seen in Appendix C.

Environmental Justice and California Environmental Quality Act (CEQA) Process

SMUD now considers environmental justice (EJ) impacts as part of our CEQA review process. The EJ chapter identifies current environmental burdens and relevant socioeconomic characteristics using analysis from elsewhere in the CEQA document and from data sets within the [Sustainable Communities Resource Priorities Map](#) including [CalEnviroScreen](#). A proposed project's potential to worsen existing adverse environmental and public health conditions is evaluated to determine if it would negatively impact the local community. If so, community enhancements are proposed to lessen any negative impacts as part of our CEQA process. Each of our CEQA documents that started in 2021 included an EJ section and none of these projects were found to worsen existing adverse environmental and public health conditions.

Sacramento Tree Foundation (STF) Sacramento Shade Program

In 2021, the STF distributed 11,628 trees as part of its Sacramento Shade program serving 3,567 customers (1,551 or 43% in disadvantaged communities). A total of 590 of the trees were planted at public sites such as schools and parks, and 3,454 (30%) were planted in under-canopied communities to help resolve regional tree canopy inequity. The total carbon (stored in biomass and avoided) for these trees is estimated at 25,770.82 metric tons. To better understand issues related to tree planting and care, STF NeighborWoods organizers actively engage residents to help resolve tree planting impediments.

Land Acknowledgment Statement

The SMUD Station H Project mitigation efforts highlighted new opportunity areas including meaningful consultation with local Tribes. SMUD staff recognized that it was important to build deeper relationships with local Tribes and take steps beyond what is

required by CEQA and AB52. Recommendations to prepare a Land Acknowledgement Statement came both from SMUD's Board of Directors and other local Native Americans. In 2021, SMUD staff started outlining the process for Native American culture and issues education, began drafting a Land Acknowledgment Statement as written affirmation of external relationship-building with local Native nations and their citizens, and identifying pathways for ongoing education and reconciliation.

Wildfire Mitigation Plan (WMP)

SMUD's goal is to provide safe, reliable, environmentally sustainable, and economical electric service to its communities. SMUD constructs, maintains, and operates our electrical lines and equipment to minimize any risk of catastrophic wildfire. Our updated 2021 [WMP](#) describes the range of activities we are doing to mitigate the threat of power-line ignited wildfires, including various programs, policies and procedures. The WMP meets or exceeds the requirements of Public Utility Commission (PUC) section 8387 for publicly owned electric utilities and customers can find additional information at [Wildfire Safety](#).

Workflow Integration Program (WIP)

The WIP processed 430 planned overhead and underground electrical infrastructure projects in 2021, which is a 39% increase from the number of projects review in 2020. Avoidance and minimization measures (AMMs) were prescribed for 61 projects to reduce impacts on sensitive biological resources and the risk of NOVs. Field crews were given information on AMMs in their job packets, including descriptions of resources they could encounter, pre-construction survey requirements and the potential inclusion of biological and/or cultural monitors.

Electric lawn mowers for customers; equipment electrification

SMUD partnered with the Sacramento Metropolitan Air Quality Management District (SMAQMD) to launch the Electric Lawn Mower Pilot Program, which provided rebates to help our residential customers make the transition from gas-powered lawn mowers to zero-emission electric ones. The pilot ran from October – November 2021 and 150 customers participated, of which 42 were EAPR customers. Rebates totaled \$26,575, with SMUD providing \$4,200 (\$100 for each EAPR customer) and SMAQMD providing the rest.

Internally, SMUD has been replacing gas/diesel-powered equipment with equivalent electric/battery-powered tools where they are available from the market, including drills, cable cutters, pole saws and top handle chainsaws, hedge trimmers and skill saws. The Facilities team has been researching the use of battery- and electric-powered landscaping equipment and working with a local vendor to evaluate future uses of a battery-powered commercial lawn mower. This year, an all-electric four-wheel drive tractor was purchased for Facilities' use.

Financial Successes

Successful Soil Reuse- In 2021, SMUD diverted 30,254 cubic yards of soil from being disposed at various landfills for an approximate savings of \$2.8 million. All soil was

tested and verified to meet acceptable reuse criteria at either SMUD's North City Landfill or the Downtown Railyards Venture property. SMUD's new soil reuse program benefits are twofold: 1) avoiding clean soil purchases and soil disposal costs, while 2) avoiding trucking emissions associated with the transportation of these soils throughout the region and state.

North City CalRecycle Grant Awarded- Again in 2021, SMUD successfully secured a second \$750,000 CalRecycle grant. This grant will be used to significantly offset the construction cost of the North City Landfill Cap (estimated to be under \$5 million).

4. Challenges

The COVID-19 pandemic changed how we conduct business as our company and stakeholders pivoted to mostly remote workplaces. SMUD continues to experience challenges with federal, state, and local regulators as rules and regulations evolve, and some agencies are slow to issue permits due to a lack of resources. We expect delays to continue as many long-term agency employees retire and less experienced staff are left to manage changing policies. Additionally, we are actively supporting electric vehicle (EV) integration in our fleet (12.4% electric) as well as our region, which is challenging due to supply chain constraints (including chip availability) and limited availability of electric heavy-duty trucks and construction equipment.

We continue to expend considerable resources on numerous, complicated environmental remediation projects (e.g., the Former Community Linen site, 59th Street Reuse, Thornton Substation, and the North City Landfill Cap Design and Construction). Some of these efforts were additionally challenging due to regulatory changes made at the national level that do not consider California-specific factors.

We conduct monthly eagle injury and mortality monitoring at the Solano Wind Project in compliance with our 2019 Incidental Eagle Take Permit. With ten golden eagle fatalities, we are approaching the 12 eagle incidents authorized under the permit. Operational modifications, including standing curtailment of 19 wind turbines were implemented during Q4 2021. We have implemented land management actions to reduce the attractiveness of the site to eagles. We are coordinating with the U.S. Fish and Wildlife Service on a revised Eagle Conservation Plan and requesting a permit amendment that would increase the amount of take authorized under the Permit. We are also applying for a new 30-year permit that would be effective after the current permit expires in 2024.

5. Recommendation

It is recommended that the Board accept the Monitoring Report for SD-7, Environmental Leadership.

6. Appendices

- A. Examples of SMUD Efforts Supporting SD-7
- B. 2015-2020 SMUD Greenhouse Gas Emissions Trends
- C. Sustainable Communities
- D. Glossary of Acronyms

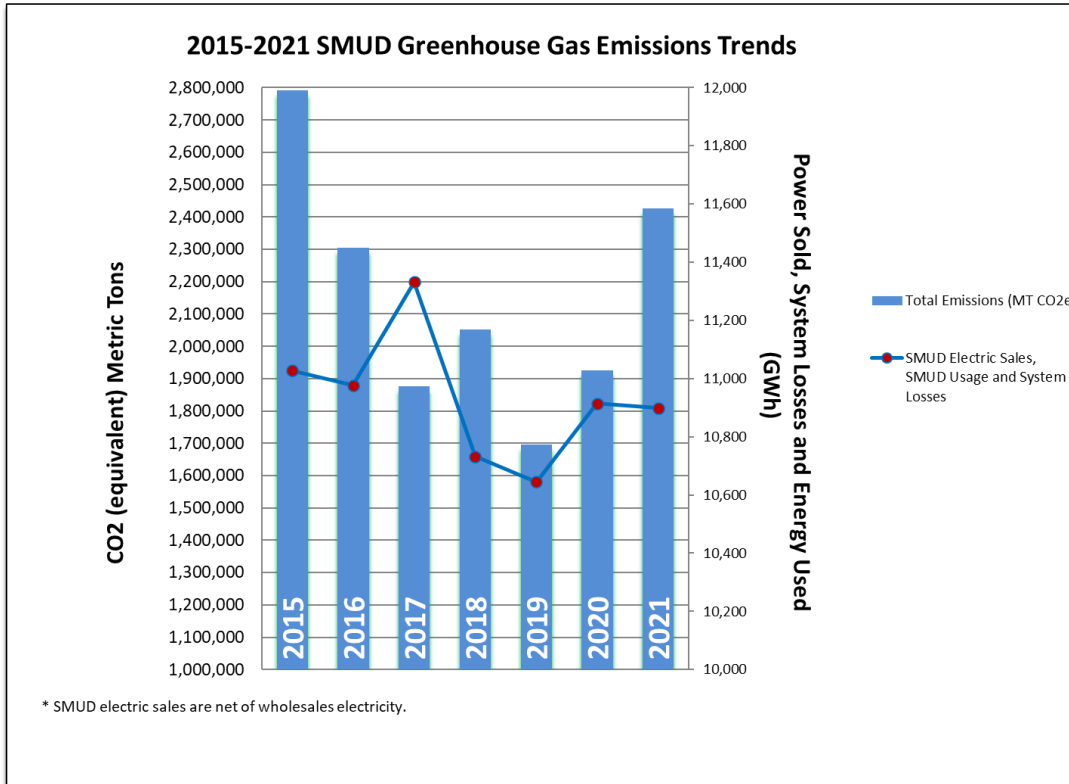
Appendix A

Examples of SMUD Efforts Supporting Strategic Direction 7 (SD-7)

SD-7 Requirement	Supporting Effort
A) SMUD will 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.	SMUD exceeds state and federal requirements for public outreach for both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA); Station E; 59 th Street; Former Community Linen; North City landfill closure; Station H; Solano 4; Workflow Integration; Wildfire Mitigation Plan; Partnership with Sacramento Tree Foundation (11,628 trees distributed to customers in 2021 with 43% in disadvantaged communities); SMUD Green Team; Environmentally Sustainable Purchasing Program (ESPP); Sustainable Communities; Pollinator Support; SD-5 (Customer Relations); SD-13 (Economic Development); SD-15 (Outreach and Communication); CA Clean Air Day; Waste diversion rate of 77.11%; Asset recovery program for used oil, e-waste, transformers, etc.
B) SMUD will provide leadership and innovation to improve air quality and reduce greenhouse gas emissions.	2030 Clean Energy Vision and Zero Carbon Plan; Third-party verified annual GHG reporting to the U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB), The Climate Registry (TCR) and CDP; GHG reduction efforts; Hydrogenation-Derived Renewable Diesel (HDRD); SF ₆ database pilot; SD-9 (Resource Planning); Integrated Resource Plan (IRP); SD-10 (Research and Development); Solano 4; ESPP; CA Clean Air Day.
C) SMUD will promote the efficient use of energy by our customers.	Greenenergy [®] ; SolarShares [®] ; Energy Assistance Program Rate (EAPR); home electricity reports; SMUD app; Incentives, rebates, and loans; web tools; educational opportunities for customers; SD-5 (Customer Relations); SD-13 (Economic Development); SD-15 (Outreach and Communication); Sustainable Communities program; SMUD MoSAC.
D) SMUD will advance the electrification of vehicles, buildings, and equipment	California Mobility Center; Fleet Electrification; Building Electrification; Sustainable Communities program; Lawn equipment electrification; Incentives, rebates, and loans.
E) SMUD will attract and build partnerships with customers, communities, policy makers, the private sector, and other stakeholders.	226 Sustainable Communities partnerships; Land Acknowledgement Statement, Electric Power Research Institute (EPRI); Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA); Partnership with Sacramento Tree Foundation (11,628

	trees distributed to customers in 2021 with 43% in disadvantaged communities).
--	--

Appendix B¹



Thermal Power Plant Greenhouse Gas Emissions			
Source	2020 MMT CO2e	2021 MMT CO2e	Percent Change
Thermal Emissions less any Cogen Sales			
CPP	1,337	1,473	10%
SCA	291	299	3%
SPA	248	282	14%
CVFA	105	111	6%
McClellan	2.72*	2.75	1%
Power Purchased and System Losses	269	495	84%
Net of Unspecified Market Purchases and Sales	-327	-238	-27%
Total	1,926	2,425	26%

*This 2020 value for McClellan also includes a nominal amount of emissions (2.06 MMT) from the Ivanpah solar facility; we are no longer accounting for it in this way starting 2021, since it is already included in the Power Purchased category.

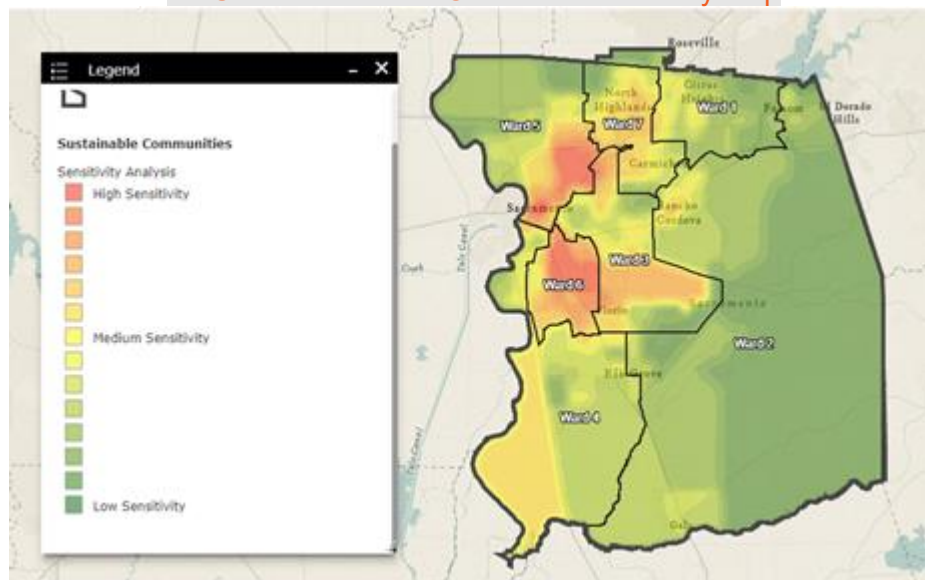
¹ Unlike SD-9, the emissions data in SD-7 is not normalized.

Appendix C

Sustainable Communities Deliverables and Accomplishments To-Date



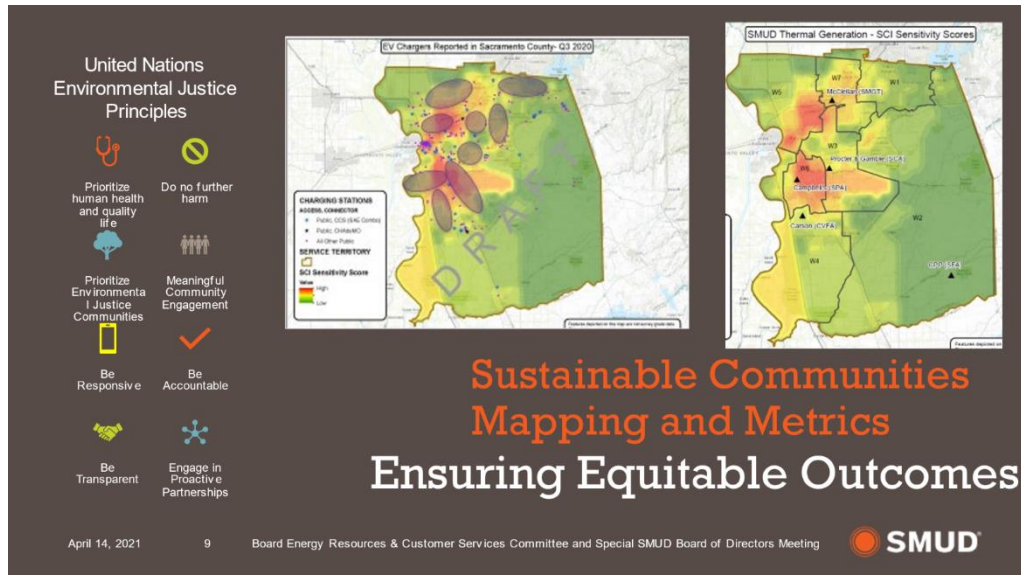
SMUD's Sustainable Communities Priority Map



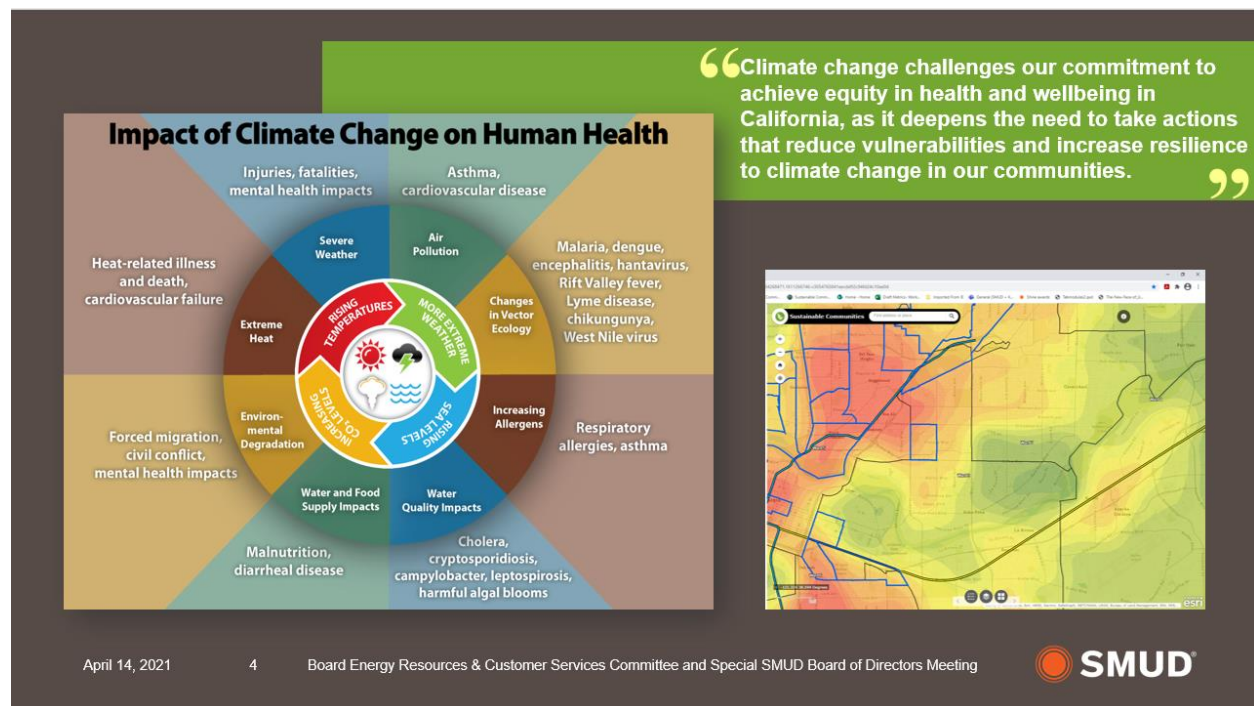
To deploy comprehensive resources for our communities most in need, we must align our region's investments toward the goal of creating and supporting healthy, vibrant, and economically sustainable neighborhoods. Our Sustainable Communities Resource Priorities Map is a result of SMUD's data-driven approach to geographically identify areas of inequity within the Sacramento region that highlight where future resources may be optimally utilized. This interactive map helps analyze current data to identify under-resourced and distressed areas in our region, driven by lack of community development, income, housing,

employment opportunities, transportation, medical treatment, environmental sustainability mitigation, nutrition, education, and clean environment.

<https://sdgs.un.org/goals>



<https://www.cdc.gov/climateandhealth/effects/default.htm>



Appendix D

List of Acronyms

CARB	California Air Resources Board
CDP	Carbon Disclosure Project (formerly)
CEQA	California Environmental Quality Act
CO₂	Carbon Dioxide
CO₂e	Carbon Dioxide Equivalent
EAPR	Energy Assistance Program Rate
EJ	Environmental Justice
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
ESPP	Environmentally Sustainable Purchasing Program
EUISSCA	Electric Utility Industry Sustainable Supply Chain Alliance
EVs	Electric Vehicles
GHG	Greenhouse Gas
GWh	Gigawatt Hour
HDRD	Hydrogenation Derived Renewable Diesel
IRP	Integrated Resource Plan
JPA	Joint Power Authority
MT	Metric Tons
NEPA	National Environmental Policy Act
NOV	Notice of Violation
PUC	Public Utility Commission
SD	Strategic Direction
SEPA	Smart Electric Power Alliance
SF₆	Sulfur Hexafluoride
SMUD	Sacramento Municipal Utility District
STF	Sacramento Tree Foundation
TCR	The Climate Registry
WIP	Workflow Integration Program
WMP	Wildfire Mitigation Plan

RESOLUTION NO. 22-10-17

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

This Board accepts the monitoring report for **Strategic Direction SD-9, Resource Planning**, substantially in the form set forth in **Attachment I** hereto and made a part hereof.

Approved: October 20, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR KERTH				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE	X			
BUI-THOMPSON	X			
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: October 5, 2022

FROM: Claire Rogers *CR 10/5/22*

SUBJECT: Audit Report No. 28007432
Board Monitoring Report; SD-9: Resource Planning

Audit and Quality Services (AQS) received the SD-9 *Resource Planning* 2022 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.

CC:

Paul Lau

Board Monitoring Report 2022

SD-9, Resource Planning



1. Background

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 will be achieved through investments in energy efficiency, clean distributed energy 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:

Year	Greenhouse Gas Emissions (metric tons)
2020	2,318,000
2030 - beyond	0

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.

2. Executive Summary

SMUD's integrated resource planning process informs long-term strategic development by the various business units within SMUD, and efforts are made to balance reliability, sustainability, environmental, financial, and customer objectives while achieving SD-9 goals. In 2020, SMUD's Board adopted a Climate Emergency Resolution that calls on the Board to work towards carbon neutrality by 2030.

In 2021, the Board revised our SD-9 targets and put us on a path to eliminate GHGs from our power supply by 2030. Also, in April 2021, SMUD's Board approved our 2030 Zero Carbon Plan, our roadmap to eliminating GHGs from our electricity supply by 2030. Taken together, our progress will be measured against this plan with the objective of eliminating GHG emissions from our power plants as we develop new distributed energy resource business models, research emerging grid-scale carbon-free technologies, and expand our investments in proven clean technologies.

In 2021, our emissions were 2.425 million metric tons (MMt). Normalized GHG emissions, which represent our emissions under a typical weather year, were 1.845 MMt. We also met our 2021 RPS target of 35.75% renewables in 2021. As this report demonstrates, **in 2021, SMUD was in compliance with each of the goals for the year established in SD-9.**

3. Additional Supporting Information

A. Implementation of our 2030 Zero Carbon Plan

Our 2030 Zero Carbon Plan is our road map to eliminating GHGs from our electricity supply by 2030 while maintaining reliable and affordable service and partnering with our customers, communities, and a wide range of stakeholders on this journey. This plan calls for eliminating GHGs from our power plants and expanding our investments in proven clean technologies. Below is a discussion of our current carbon footprint as well as an update on the near-term actions we're taking in support of our SD-9 goals and our 2030 Zero Carbon Plan; for more detailed project information see Appendix C – Detailed Project Descriptions.

As shown in Table 1, SMUD's GHG footprint in 2021, adjusted for weather and hydro conditions, was 1.845 MMt, which is on trajectory to our 2030 Zero Carbon goal. SMUD's main sources of GHG emissions were from SMUD's thermal power plants and market purchases.

Table 1: 2021 SD-9 Carbon Footprint & Near-term Targets

Source	Net Power (GWh)	CO2e Emissions (1000 t) ¹
Net Generation and Power Purchases	11,882	2,663
Wholesale	(983)	(238)
SMUD Electric Sales, SMUD Usage and System Losses Non-Normalized Total²	10,899	2,425
Adjustment for Normal Load		(122)
Adjustment for Normal Wind and Hydro		(304)
REC Banking Adjustment		(154)
SMUD Normalized Total (estimate)		1,845
2030 Target		0

Expanding our Sustainable Power Supply; Local and Regional Benefits

We're focused on reimagining our generation portfolio through retirement or retooling of our natural gas assets, expanding our local investments in proven clean technologies and launching pilot projects and programs for new and emerging technologies all while continuing our work to improve equity for our under-resourced communities and the health of ecosystems that support us all.

Proven Clean Technologies and Zero Emission Resource Development

We continue to add and plan new proven clean technologies, such as wind, geothermal, solar, and energy storage that will continue to reduce our GHG emissions, tracking with our 2030 Zero Carbon Plan. Staff continue to conduct procurement efforts, cultivate new resource development, and implement new ideas. In 2021, we added over 160 MW of renewables and have over 1,000 MW of new renewables and storage in the pipeline for development to serve our customers due online in the

¹ Based on SMUD's internal accounting and represent best estimates available. The thermal power plant emissions, SMUD's largest source of emissions, have been independently verified. Biogenic emissions are excluded as they are part of the natural carbon cycle.

² Emissions by individual thermal asset can be found in the 2021 SD-7 Report.

coming years. And in late 2021, SMUD released a request for developer proposals for solar plus battery projects in the northern portion of our service territory.

Although our goals are more ambitious than already aggressive state mandates, we continue to implement a renewable energy strategy that fulfills state RPS requirements. SMUD achieved our 2021 RPS target by serving 35.75% of retail sales with renewables and are on path to achieving the next RPS statutory requirement of 44% RPS in 2024.

We continue to be a leader in the nation by offering our customers voluntary renewable program choices. Last year SMUD delivered 949 GWh, 9.1% of retail sales, to customers participating in Greenergy and SolarShares. Our Greenergy program served more than 72,000 residential and commercial participants equal to 632 GWh and our Large Commercial SolarShares program met program expectations, delivering 317 GWh of renewable power to these customers. Our Neighborhood SolarShares program, approved by the CEC in early 2020, will be served from solar resources within SMUD's service territory. The first of those resources, Wildflower (13 MW), came online in December 2020. In 2021, 120 homes were completed by builders and started billing under the Neighborhood SolarShares program. The program delivered 64 MWh of local solar power to participating customers in 2021.

New Technology and Business Models

Using proven clean technology, we expect to be able to reduce our 2030 emissions by 90% without compromising reliability or our low rates. To eliminate the last 10%, we'll need to explore, develop, and demonstrate new technologies. As part of our 2030 Zero Carbon Plan, we are on track with our year one implementation priorities in this area.

- Perform information technology system upgrades to enable DERs and VPPs – this work is ongoing, anticipated initial implementation to be completed in 2022.
- Work to integrate DERs in operations, distribution and the grid planning process is ongoing and will evolve based on our experience with our new load flexibility pilots.
- Support our load flexibility efforts by launching new pilots, including the storage virtual power plant, and expanding our EV managed charging and vehicle-to-grid demonstrations.

We continue to fund research and development efforts and to look for grants for clean energy and GHG reduction projects. Finally, recognizing the importance of equity, we will continue to prioritize under-resourced communities to help reduce the energy cost burdens of our low-income customers while ensuring equity in our program offerings.

Improving Equity for Under-Resourced Communities

SMUD's GHG reduction actions help reduce climate change, but our work is about more than that. We are staying true to our roots—as a community-owned organization, implementation of our 2030 Zero Carbon Plan will deliver wide-reaching benefits to our community, including expanded workforce development program offerings, while focusing on equity and strengthening our communities—one SMUD, one Sacramento. In 2021, SMUD began developing a Community Impact Strategy. This 2030 Zero Carbon Plan aligned stakeholder-informed strategy, to be completed in 2022, will underline our commitment to making meaningful investments in under-resourced communities to ensure their participation in a clean energy future. Thus far, strategy development has included community listening sessions and stakeholder feedback, detailed gap analysis of who we are serving, and identification of barriers to participation across customer segments.

Through a collaborative, community-based approach, SMUD identifies emerging zero carbon energy and electrification related jobs and skills and partners with community organizations and education entities to create training programs to position participants from under resourced communities to fill the projected need for workers in the clean energy industry and other emerging high wage careers.

- SMUD has partnered with GRID Alternatives to provide job readiness and technical training to almost 100 community participants to prepare them for careers in the clean mobility sector.

Energy Efficiency and Building and Vehicle Electrification

Our building energy efficiency portfolio includes offerings for residential retailer incentives, residential customer rebates, commercial builder incentives, and commercial customer rebates. The building electrification portfolio includes offerings for gas-to-electric conversions of water heating equipment, space heating equipment, and cooktops delivered through residential new construction, whole house retrofits, and prescriptive equipment rebates. In 2021, our energy efficiency and building electrification programs reduced emissions by 53,388 tCO₂ [Civic Carbon], equivalent to 6,817 additional all-electric homes.³ Our goal is to have these building electrification and efficiency programs reduce emissions by 365,000 t in 2030, the equivalent of electrifying 112,000 single family homes.

SMUD's vehicle electrification portfolio includes offerings in residential electric vehicle (EV) incentives, dealership incentives, residential outreach, commercial charger incentives, and commercial vehicle incentives. At the end of 2021, we had 23,576 EVs registered within SMUD's service territory, an increase of 5,599 registered vehicles⁴ and an estimated annual reduction of almost 26,000 t. 21,218 are residentially registered EVs.⁵ Our goal is to have these vehicle electrification programs reduce transportation emissions by 1,000,000 t in 2030, the equivalent of electrifying 288,000 vehicles.

B. Promote Cost Effective Clean Distributed Generation and Storage

SD-9 requires that SMUD develop programs to promote cost effective, clean distributed generation. The following describes progress in 2021 and alignment with our 2030 Zero Carbon Plan.

Flexible Demand

Our flexible demand programs seek to optimize operation of our customer-partner's equipment and distributed energy resources while balancing customer-partner and grid needs as well as compensating customers for the energy they supply into SMUD's grid for use by other customers. In 2021, we awarded a program implementation contract for the residential My Energy Optimizer – Partner level offerings for smart thermostats and battery storage systems. Set to be launched in Summer 2022, this program is the first of SMUD's Virtual Power Plant initiatives, which includes a Critical Peak Pricing rate offering. Other planned initiatives for 2022 include launching the residential Managed EV charging pilot and the My Energy Optimizer – Partner+ program for battery storage (storage virtual power plant as mentioned above).

With our PowerDirect[®] program, commercial customers were notified ten times to curtail load; average load reduction of 4.29 MW to 8.54 MW across the duration of the events.⁶ Under our temperature dependent rates, two commercial customers were notified five times during the summer, 6.28 to 14.38 MW of load reduction was realized.⁷ Finally, our air conditioning load management program called Peak Corps, provides about 59 MW of resource adequacy capacity and remains an operational

³ The DER Cost Effectiveness Tool evaluates and accounts for DER program effectiveness, calculating gross annual emissions impact. It is reported in each year the "measure" is installed on the grid and within its useful life.

⁴ EPRI Vehicles in Operation (VIO) report

⁵ IBID.

⁶ NERC WebDADs report

⁷ NERC WebDADs report

resource to be used in case of an emergency. All together, our dispatchable programs provide an expected load shed range of 53.5 to 77.5 MW; our non-dispatchable programs provide between 0 and 15.5 MW of expected load shed.

As part of our load flexibility programs, we offer time-of-day rates, which give majority of our customers more time on the lower priced non-summer seasonal rate. A new optional residential Critical Peak Pricing rate was approved for implementation in early 2021. This rate is applicable to qualifying load flexibility programs that are being offered to support the 2030 Zero Carbon Plan, such as the My Energy Optimizer Partner offering mentioned above.

As part of our 2030 Zero Carbon Plan, pilot programs aimed at flexible energy use will allow customers to reduce their energy usage and bills at times when grid stress is the highest.

Clean Distributed Generation and Storage

In 2021, we had almost 40,000 total customer-sited PV installations in SMUD's service territory and over 500 total customer-sited storage installations. During the year, 26 MW of customer sited solar PV was installed (about 5,500 systems) and almost 3.5 MW of commercial (about 170 systems). Additionally, 1.62 MW of residential customer-sited energy storage projects were installed or in progress, about 250 systems; 1 commercial system was installed (0.01 MW). In addition, SMUD's first utility-scale battery storage system, a 4 MW lithium-ion battery connected to our distribution system, became operational.

4. Challenges

There were no notable challenges to meeting the goals in SD-9.

5. Recommendation

It is recommended that the Board accept the Monitoring Report for SD-9.

Appendix A – SD-9 History

SD-9 was established by SMUD's Board in 2004 and provides direction for SMUD's ongoing environmental leadership and the use of an IRP process to achieve these directives while balancing environmental goals with financial and customer rate impacts and reliability requirements. SMUD's strategic directions have evolved as markets, policies and laws have changed.

In December 2008, the Board added sustainable power supply as the overall objective of the integrated resource planning process and set a GHG emissions target. In 2018 the Board updated our greenhouse gas reduction goals to include a 2040 Net Zero GHG goal. In 2020, the Board amended SD-9 to adopt carbon-based targets for energy efficiency and building electrification. This change represents the first time a major utility has used carbon as its efficiency tracking metric and was done to better align our energy efficiency and electrification programs as well as to align both of those programs with our evolving energy supply picture.

In April 2021, the Board adopted Resolution No. 21-04-04 which updated the SD-9 direction to align with our 2030 goal of 0 t GHG emissions in our energy supply by 2030, as put forth in our *2030 Zero Carbon Plan*. SMUD has embarked on a path to zero carbon by 2030, focusing on zero carbon resource acquisition and new renewable energy contracts, expanding on customer programs for energy efficiency and building and transportation electrification, developing new voluntary customer programs, and researching emerging clean energy technology. Under SD-9, SMUD's goal, the reduction of GHG emissions for serving retail load from its current state to zero carbon by 2030, is more aggressive than California's SB 100 trajectory, which requires that utilities meet electric demand with at least 60 percent eligible renewable resources by 2030.

Appendix B – Methodology Discussion

Normalization Adjustments

Emissions adjustments to SMUD's actual GHG footprint include a *decrease* to account for higher-than-expected energy usage by SMUD customers, a *decrease* to account for lower-than-expected hydro production, an *increase* to account for higher-than-expected wind production and a *decrease* for using banked renewable energy credits (RECs). In 2021, SMUD strategically utilized banked RECs to achieve RPS mandates as additional large renewable projects are developed. In previous years, SMUD procured more renewable energy than required and received credits for future use. These credits were saved or banked in accordance with RPS rules, which *increased* our normalized SD-9 emissions in those years to account for these banked RECs. Using these banked RECs lowers SMUD's normalized emissions because any emissions impacts were realized at an earlier date, but not yet credited to SMUD. As SMUD utilizes its remaining REC surplus over the next few years and renewable procurement ramps up to meet the 2030 Zero Carbon Plan goals, which are expected to far exceed RPS obligations, SMUD plans to phase out REC normalization.

In 2021, a historic drought affected much of the Western United States, which resulted in lower hydropower generation across California and the Pacific Northwest (PNW). In previous years, short-term carbon-free power purchases from the PNW have greatly contributed to SMUD being below our SD-9 carbon goal the last several years, but we understood that our ability to take advantage of these resources was highly dependent upon water conditions in the PNW and thus availability. Due to these widespread drought conditions in 2021, which resulted in the reduced availability of low carbon and carbon-free resources from the PNW, SMUD was not able to purchase at the same level as previous years, which contributed to emissions increases relative to 2020.

Renewables Portfolio Standard (RPS)

State RPS law requires SMUD procure renewable generation of at least 60% of retail sales by 2030 as well as interim targets be achieved over several compliance periods⁸. In 2021, we achieved our, and the State's, RPS target of 35.75% with 3,485 GWh of eligible renewable energy.

Appendix C – Detailed Project Descriptions

Sustainable Communities

Implementation of our 2030 Zero Carbon Plan will deliver wide-reaching benefits to our community while focusing on equity and strengthening our communities.

- Transportation Electrification. SMUD is dedicated to partnering with the community to expand eMobility Hubs throughout our region, which will be strategically located at sites in under-resourced communities. These Hubs will include various modes of transportation such as public transit, micro mobility, shared mobility, ride hail, taxi services, community electric vehicles, public EV charging stations, etc. Additionally, EV programs will be expanded to assist customers that own or lease an electric vehicle to charge at home by providing low cost or free EV charging infrastructure for income eligible customers and expertise on home charging solutions. We also offer incentives to expand EV charging infrastructure at public locations, multifamily properties and affordable housing sites.
- Load Flexibility. SMUD will work to ensure that all customers can participate in the portfolio of load flexibility pilots launching in 2021 and 2022. These pilots will help achieve our 2030 zero carbon goal, yet they can sometimes require costly technology like a smart thermostat, electric vehicle, or battery storage system to participate. SMUD will continue to explore ways in which our load flexibility pilots can be more inclusive despite this barrier. Possible examples include, integrating load flexibility program enrollment into our existing low-income weatherization program, which already provides a no-cost smart thermostat in most cases and/or creating a no-cost technology installation pathway for low-income homeowners or renters to participate in our virtual power plant program with their heating/cooling system.
- Building Electrification and Energy Efficiency. To support SMUD's equity efforts as part of the 2030 Zero Carbon Plan, SMUD will continue expansion of its existing efforts to provide no-cost energy retrofit installations to income eligible residential customers for both gas-to-electric conversions and electric-to-electric upgrades. Available project measures include electric heat pump water heaters, electric heat pump HVAC units, seal and insulate projects, and panel upgrades. In addition, SMUD will continue to provide a low-income incentive premium for projects within SMUD's Multifamily retrofit program that meet affordable housing criteria

Our Sustainable Communities Workforce Development efforts partner with organizations to reach into our community to understand the challenges that residents face in pursuing good-paying careers. SMUD trained over 800 people in a variety of skills to help them find higher paying, more secure jobs. At the same time, we renewed our focus on the jobs and skills that will help our community get to zero carbon.

As part of that effort, SMUD completed the first year of its inaugural Energy Careers Pathways training partnership with Grid Alternatives. The solar workforce program recruited individuals from under resourced communities and provided them four weeks of paid instruction; two weeks of online learning and two weeks of in-person instruction in a hands-on format. Upon graduation, participants

⁸ Senate Bill 100 (De León, Chapter 312, Statutes of 2018) increased RPS targets to 44% by the end of 2024, 52% by the end of 2027, 60% by the end of 2030 and sets a statewide retail sales goal of 100% RPS eligible and zero-carbon resources by 2045.

were matched with potential employers to demonstrate what they have learned by showcasing conduit bending, wired J-boxes, and more. Students also learned about the installation and importance of battery storage and EV charging infrastructure. The program closed the year with a total of 196 program applicants, 93 participants completing the initial 2-week online training, 52 participants completing the subsequent 2 week in-person training, and 28 job placements.

Additionally, to deploy comprehensive resources for our communities most in need, we must align our region's investments toward the goal of creating and supporting healthy, vibrant, and economically sustainable neighborhoods. We have several data collection and visualization tools aimed at matching areas of inequity within the Sacramento region with future investment; we're working to address potential inequities in the way we do business. These include our Sustainable Communities Resource Priorities Map, which we used as part of our 2030 Zero Carbon Plan work in 2021 to identify thermal power plants in high/moderately high sensitivity areas that should be targeted for emissions reductions and our internal Sustainable Communities Dashboard. This dashboard tracks funding and links partners and projects across six key focus areas – Institutional Support and Outreach, Education, Health Equity, Environmental Leadership, Economic Development, and Transportation and Access. These metrics coupled with expanded access to equitable workforce pipeline and business creation, will serve to validate investments across focus areas.

Proven Clean Technology Projects

Table 2 details new proven clean technology procurement activities.

Table 2: New Procurement and Project Development Status

Project Name	Type	MW	Status	Projected Online or Delivery Date
Rancho Seco 2	PV	160	Online	2021
Chili Bar	Small Hydro	7	Online	2021
Hedge Battery	Battery	4	Online	2022
NTUA Drew Solar	PV	100	Under Construction	2022
Northern California Geothermal	Geothermal	100	Procured	2023
Coyote Creek	PV	200	Planning	2024
	Battery	100		
Slough House	PV	50	Planning	2023
Country Acres	PV	340+	Planning	2024
	Battery	170+		
Solano 4	Wind	86	Pre-Construction	2024
Total		1,000+		

Additionally, in the near-term, we are exploring options to procure or develop additional zero emission resources, including local solar and storage, to help achieve our 2030 Zero Carbon Plan.

Energy Efficiency Programs

In 2021, accomplishments for SMUD's residential new construction program include 298 newly built all-electric homes and installed 781 gas-to-electric heat pump water heaters in existing homes, 1,392 gas-to-electric HVAC systems in existing homes, and 133 gas-to-electric induction cooktops in existing homes.

Below, in Table 3, is a summary of some of our 2021 energy efficiency and building electrification accomplishments, including offerings for our income eligible customers.

Table 3: 2021 Energy Efficiency and Building Electrification Accomplishments

Measures & Projects	Results
Commercial Projects Completed Complete Energy Solutions	60
Commercial Projects Through Express Energy Solutions	681
Custom Commercial Projects Completed	59
New Efficient Commercial Buildings Constructed	21
Multifamily Apartments Retrofitted (Electric To Electric)	136
Multifamily Apartments Retrofitted (Gas To Electric)	79
Efficient Induction Cooktops (Electric To Electric)	157
Efficient Induction Cooktops (Gas To Electric)	133
Energy Star Products Purchased through RPP Retailers	35,830
Advanced Power Strips Installed	1,936
Old Refrigerators Recycled	2,641
Residential Heat Pump Water Heaters Installed (Electric To Electric)	4
Residential Heat Pump Water Heaters Installed (Gas To Electric)	781
Residential HVAC Installations (Gas To Electric)	1,392
Residential Seal and Insulate Installations	427
All Electric New Homes Constructed	298
Income Eligible Energy Efficiency Bundles and Electrification	Results
Energy Efficiency Weatherization	1,998
Heat Pump Space Heating (Gas to Electric)	178
Heat Pump Water Heaters (Gas to Electric)	98
Induction Stoves (Gas to Electric)	19

Vehicle Electrification

The California Mobility Center applied for and received IRS tax exempt 501(c)(3) status in 2021. After securing a lease for its initial 25,000 square foot manufacturing and prototyping facility at Depot Park, CMC procured its initial baseline equipment and was commissioned in Q1 2021. The facility, called Ramp-Up-Factory (RUF) is operational with training suite installed. 15 service provider contracts were executed with additional consultants and strategic partners that continue to support the CMC and CMC clients.

In 2021, CMC expanded the Board from a Founders group of five to a broad-based Board of 16, with strong automotive sector representation. CMC developed its online, recruitment management tool to expand its membership campaign. By year-end, CMC reached a total of 39 members, with 98 representatives registered in the online portal. Additionally, CMC launched various membership committees, the Industry Advisory Council and a monthly CMC Thought Leadership webinar series.

CMC designed and developed materials for the organization's marketing and public relations initiatives; continually updated its rebranded website (www.californiamobilitycenter.org); and wrote/distributed eight press releases in 2021, reaching over 15,000 media industry views. Additionally, CMC appeared in over 213 industry and news articles and sponsored twelve industry events held in the US and internationally.

Lastly, the CMC workforce program has provided training in partnership with community-based organizations, adult learning centers and CSU Sacramento. The Workforce Pathways Partnerships

Program started in 2020 with a \$1.4 million CARES Act grant from the City of Sacramento. In 2021, CMC received a \$600,000 grant from California Workforce Development Board to advance jobs and training associated with the climate and technology impacted industries. CMC was able to assist 115 people in securing internships or employment through the Workforce Pathways Partnerships Program.

SMUD team members also collaborate broadly through the Sacramento PEV Collaborative, which includes the County of Sacramento, the City of Sacramento, Sacramento Metropolitan Air Quality Management District (SMAQMD), Sacramento Area Council of Governments (SACOG), State of California agencies, UC Davis Institute of Transportation Studies, Electrify America, Sac EV and many others.

In 2021, SMUD's Drive Electric program continued to promote adoption of plug-in electric vehicles (PEV) through a special EV rate offering, launch of our "Charge@Home" residential EV charger purchase and circuit installation rebate in December, and participation in educational events, educational offerings through our website <http://www.SMUD.org/DriveElectric> and in collaboration with local auto dealers and Sac EV. At the end of 2021, 12,176 customers, approx. 60% of Residential EV households, participated in the EV rate credit (midnight to 6 AM EV charging discount). Moreover, through SMUD's funding of the statewide California Clean Fuel Reward program SMUD customers received 4,790 point of sale rebates on the purchase or lease of a new EV.

Due to COVID restrictions, in lieu of in-person events, staff produced a virtual ride & drive video to expand capabilities and reach. The video, designed for customers, is "experiential" and to the extent possible educates viewers on many "EV lifestyle" elements. The video received over 17,000 views between its August 2021 launch and the end of the year.

Other 2021 activities included:

- SMUD Commercial EV Program and partnership with California Electric Vehicle Infrastructure Project (CALeVIP) incentives included 242 Level 2 handles, 58 DC Fast Chargers and 26 vehicles incentivized. SMUD partnered with the California Energy Commission and the Center for Sustainable Energy on the California Electric Vehicle Infrastructure Project (CALeVIP) in Sacramento County to promote the installation of public level II and DC fast charging stations. The program stopped taking applications for new projects in October 2021, but installations will continue into 2022 and 2023. The partnership was the first of its kind in the state and is being used as a model for projects in other areas of California.
- Continued live online dealer EV sales training webinars as well as on-demand online training, in response to COVID, as an additional resource to enhance dealer certification as PlugStar certified dealers. Twenty-two dealers are participating in the program.
- Increased exposure to and participation in our "EV Concierge" service for SMUD customers through Plug in America's Electric Vehicle Support Program, which offers live one-on-one support answering questions on all things EV.
- Implemented our second EV auto dealership competition to encourage and incentivize EV sales and reward dealerships and their staff for increased EV promotion.
- Continued integral support of the Clean Cars for All program in conjunction with SMAQMD. This program provides up to \$9,500 toward a new or used PEV for income-qualified residents living in areas impacted by higher levels of pollution (disadvantaged communities). Through this partnership, SMUD has provided a free installation of a home EV Charger for customers that participated in Clean Cars for All; we installed 131 in 2021.
- Facilitated the third *Charge Up Change!* EV video competition in which middle school students produce a video on why "EVs are cool" and compete for monetary awards and other recognition.

Time-of-Day (TOD) Rates

Our residential customers reduced overall load in the range of 75-115 MW. In addition to avoiding peak energy prices, customers, on average, saved money using more energy in the middle of the day when retail energy prices are cheaper, and renewables are abundant. Participation in the program has remained strong with 97% of customers on TOD rates.

Table 4: 2021 Results of TOD Implementation Compared to Pilot Projections

Benefits	Pilot projections	2021 Normal Weather
Carbon reduction (metric tons)	3K-5K	11.45K
Residential peak load reduction	75MW, or 5.8%	~75MW – 115MW, or 4-7%
Financial benefit	\$4M annually	\$11M estimated ⁹
Selection of TOD	96%	97%

Zero Emission Resources

We are continuing to fund research and development efforts as well as pursue grants for clean energy and GHG reduction projects in 2021 and beyond as part of our 2030 Zero Carbon Plan. Below are just a few of the projects that we explored in 2021; more information on our research and development work can be found in our annual Strategic Direction 10 (SD-10) Report.

- Carbon Reduction Projects for Zero Carbon Planning. Completed high level techno-economic assessments of proven and emerging clean technology expansion opportunities (wind, on-shore and off-shore; solar PV; geothermal; biomass/biogas for RNG), long duration storage technologies, carbon capture, renewable hydrogen and gas pipeline analysis. Results of these assessments will be used as information in our continuous planning efforts for our 2030 Zero Carbon Plan.
- Assessment of Alternative Clean Fuels. Completed assessment of sustainability, existence of supply/suppliers, price forecasts, market trends, and the economic/technical feasibility of alternative biofuels such as ethanol, biodiesel, renewable diesel, propane, RNG, and green hydrogen. RNG and green hydrogen were short listed for further deep dive assessments and considerations to decarbonize our natural gas power plants.
- Wind Resources in Northern CA. Assessed all available wind generation resource potentials in Northern California that can feasibly deliver to SMUD or the Balancing Authority of Northern California.
- Low-carbon Fuel Standard (LCFS) Electricity Pathways. For Van Warmerdam and Van Steyn Dairy Digesters, completed the first annual re-calculation of carbon intensities (CIs) and annual report with recent performance data that were submitted to CARB. For New Hope Dairy Digester, completed the certification of New Hope Dairy Digester Electricity Pathway to charge EVs with CI score of -750.81 gCO₂/MJ (CI Deemed Complete: 1/1/2021, CI Certified on 6/28/2021, CI Start Date: 1/1/2021)

⁹ This calculation uses customer load adjusted for impacts of COVID 19.

Grant Funded Clean Energy Projects

- Hydrogen Blend Collaborative Research. Completed the literature review and technoeconomic analysis requirements for this pipeline hydrogen blending collaborative research. This project will address the barriers on pipeline materials compatibility & degradation related to the blending of hydrogen into natural gas pipelines, a concept referred to as HyBlend. SMUD will provide data and will serve as one of the sites or use cases for injection point of H2. Data that will be provided will be used for techno-economic analysis to quantify costs and opportunities of H2 production and blending with natural gas.
- BestFit Innovative Charging Solutions. SMUD will partner with Electriphi, the project lead applicant, in collaboration with other key partners to demonstrate a cost-efficient and grid-friendly pathway for fleet electrification across diverse vehicle types. This project will accelerate V2G, offsetting what would otherwise be costs to SMUD.
- Blueprint for Medium & Heavy-Duty Zero-Emission Vehicle Infrastructure. Grant-funded project by the CEC to create a landmark regional blueprint plan to accelerate adoption of medium and heavy-duty Zero Emission Vehicles in Sacramento and West Sacramento. The plan will identify locations for charging and hydrogen refueling stations that will optimize existing grid capabilities, reducing implementation and operational costs while accommodating the needs of communities. The project also assesses workforce development needs to implement the plan's various elements and to ensure broad economic opportunity in the growing EV sector.

Distributed Generation Studies

- DER Carbon Tool. Completed the development and expansion of DER planning and modeling tool that assess carbon reduction/savings, budgeting, portfolio optimization, cost effectiveness and load forecasting for EE and building electrification, electric vehicles (EV), solar PV, battery storage and flexible load measures.

Climate Change and Ecosystem Service Research Projects undertaken in 2021

These projects provide technical, economic, and policy expertise on climate change and biodiversity, assisting operations in identifying and addressing climate vulnerabilities, and creating opportunities for SMUD, customers and community partners to support climate neutrality and ecologically regenerative projects with a net positive impact.

- Began executing our multi-year ecosystem service integration research at SMUD's Rancho Seco II Solar project, including soil carbon monitoring, native seeding and hedgerows, grazing and pollinator field studies, with partners the Electric Power Research Institute (EPRI), UC Davis Wild Energy Lab and the Xerces Society. This research is expected to continue until Fall 2025.
- Began development of a new Agrivoltaic research program proposal for integration with future utility scale solar projects in support of regional food security.
- Continued executing American Public Power Association Demonstration of Energy and Efficiency Development (APPA-DEED) grant-funded field assessment and reporting on two new grocery store installations funded by our award-winning Natural Refrigerant Incentive Program, which are expected to deliver over 10,000 t CO2e reduction relative to conventional systems.

Voluntary Renewable Energy Programs

Greenenergy is a voluntary green pricing program that gives customers the option to receive carbon free electricity generated in and delivered to California by paying a fixed monthly rate (\$4 or \$8) to match either 50% or 100% of their usage with renewable energy credits. When a customer enrolls in

Greenenergy, their usage is tracked according to their enrollment level. SMUD uses the proceeds from this program to purchase renewable/carbon free power or renewable energy credits to supply participants from generators located within California. These purchases are in addition to our RPS requirements.

Customer-side Solar and Storage Status

In 2016, SMUD achieved our SB1 Program funding goals for residential and commercial solar installations. Currently, there are remaining SB1 funded solar projects still under development. Additionally, residential and commercial solar systems are being installed under our net-energy metering tariff. In 2021, nearly 30 MW of new customer solar was installed in SMUD service territory under net-energy metering agreements. Table 5 summarizes solar installation data through 2021 and Table 6 summarizes our cumulative customer storage installations through 2021.

Table 5: Installed Customer PV¹⁰

	Residential		Commercial		Totals	
	Installed Systems	MW	Installed Systems	MW	Installed Systems	MW
2021	5,535	26.56	171	3.36	5,706	29.92
Totals	39,071	174.14	888	108.38	39,959	282.52

Table 6: Cumulative Customer Storage Installations

	Residential		Commercial		Totals	
	Installed Systems	MW	Installed Systems	MW	Installed Systems	MW
2021	246	1.62	1	0.01	247	1.62
Totals	504	3.35	2	0.21	506	3.56

¹⁰ This table includes net-energy metering (NEM), Solar Smart, virtual net-energy metering (VNEM) installations, and projects funded with SB-1 dollars.

President Rose then turned to Informational Item 19 and stated that any public comment on informational items could be provided during the general public comment period.

Lisa Limcaco, Director, Accounting & Controller, gave a presentation on agenda item 19, to provide the Board with SMUD's financial results from the eight-month period ended August 31, 2022. A copy of the slides used in her presentation is attached hereto.

President Rose then turned to agenda item 20, statements from the public regarding items not on the agenda. He 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.

Kevin Boll, President of Friends of Capitol Mansions Neighborhood Association, spoke regarding his concerns pertaining to the lighting along Matsui Alley. He asked for the lighting to be fixed or to be compensated in the amount of \$7,858 for what he termed improperly installed lights.

General Counsel Lewis briefly stated that the lights were installed pursuant to SMUD's Nightlight Policy, which only allows SMUD to light private property. Ms. Lewis stated she was unaware of expenses that have not been reimbursed, and staff would meet with Mr. Boll to understand the costs he referenced and further review the matter.

President Rose thanked Mr. Boll for his comments and advised that the Board could not further engage in a discussion because the item was not agendized. He stated that if other Board members were interested in a future discussion, he was open to adding it to a future agenda.

Public comment was received, copies of which are attached to these minutes, from the following members of the public:

- Elizabeth Wroten
- Michael Garabedian

President Rose then turned to Directors' Reports.

Director Bui-Thompson reported on her attendance at the SMUD Cares reception and thanked SMUD staff for their work on volunteer projects and

fundraising for charities. She also reported on her attendance at the Capital Airshow and the American Leadership Forum (ALF) awards. She closed by stating she had the opportunity to present an award at the last home game of the Sac Republic to Mayor Pro Tem Eric Guerra for exemplifying leadership in the Latino community.

Director Fishman reported on his attendance at the groundbreaking ceremony for Empowerment Park, which is an all-inclusive play part to accommodate children who are other-abled. He reported on his participation in the Sac Metro Chamber's Study Mission to San Diego as well as his attendance at the inaugural Filipino Community of Sacramento and Vicinity's Icon Awards where Director Tamayo was honored as an award recipient. He closed by reporting that he had emceed the Project R.I.D.E. Annual Spaghetti Dinner and Festival fundraiser.

Director Herber reported on her attendance at the SMUD Cares reception and thanked Jennifer Davidson for being the Executive Sponsor. She reported on her attendance at the Burnett Awards by the Sacramento History Museum where iconic Sacramento businesses were honored. She reported on her attendance at the ALF dinner. She closed by congratulating Director Tamayo on his award.

Director Kerth congratulated Director Tamayo on his award and then reported on his attendance at the North State Building Industry Association (BIA) presentation on induction cooking as well as the SMUD Cares reception. He reported on his attendance at the Capital Airshow, where a demonstration of an electric airplane was also provided, as well as the groundbreaking at Empowerment Park and the 150th anniversary of the Professional Firefighters of the City of Sacramento.

Director Tamayo reported on his attendance at the Filipino Community of Sacramento and Vicinity where he and other honorees received awards, his being for environmental leadership. He reported on his participation in the Business Environmental Resource Center (BERC) Sustainable Business Awards Ceremony as well as the Back to the Boulevard event. He reported on

his attendance at the North State BIA breakfast, his meeting with some Tahoe Park community leaders regarding a mural for the substation on 14th Street, and the South Sacramento Community Fair organized by Councilmember Mai Vang. He closed by reporting on his tour of LICAP Technologies, Inc.

Vice President Sanborn congratulated Director Tamayo on his award. She then reported on her speaking engagement with the Asian Chamber Foundation Catalyst Leadership group and her attendance at the second annual Women Can Do It Together event at the Aerospace Museum. She reported on her attendance at the SMUD Meet the Buyers event and at the SMUD Cares reception. She reported that she had spoken at the Clean Air Day event as well as her tour of the LICAP facility. She closed by reporting on a tree planting with the Kiwanis Club at Cameron Ranch Park and her participation in the Sac Metro Chamber Study Mission.

President Rose reported that he had enjoyed the fusion panel provided during the October 11 Strategic Development Committee and encouraged those interested to watch the recording. He reported on his attendance at the Fair Oaks Chicken Festival provided by the Fair Oaks Recreation & Park District and the Clean Currents Conference provided by the National Hydropower Association. He closed by noting that an interesting article he had read in the *Sacramento Business Journal* about a company called Phoenix Motorcars purchasing a hydrogen fuel cell manufacturing facility in Folsom from Altery Systems.

Paul Lau, Chief Executive Officer and General Manager, reported on the following items:

- 1) **California Clean Air Day.** We kicked off October with California Clean Air Day –collecting 689 pledges from employees! By the October 5th event, SMUD had exceeded our goal of 30% employee participation! Our employees committed to various ways to help clear the air in our community – like walking or biking instead of driving, composting food and choosing electric or hand-powered yard tools over gas-powered

alternatives. Thank you, Vice President Sanborn, for joining several other local leaders at SacRT's 39th Street/UC Davis Health Station to recognize Clean Air Day. The leaders urged residents and businesses to help remedy California's air quality problem by committing to simple lifestyle changes.

2) Meet the Buyers. Another recent event with a great response was SMUD's Meet the Buyers - had its kickoff mixer in-person for the first time since 2019. The Meet the Buyers event reaffirms our commitment to provide ongoing support for small and local businesses. It is also a great chance for businesses to get a closer look at potential contracting opportunities and learn how to do business with SMUD. Last year alone, over 23% of our contracts went to Supplier Education and Economic Development (SEED) vendors – that is 48 million dollars! During the event, 12 new businesses registered for our SEED program and one of those businesses has already secured a new contract opportunity!

3) SMUD Giveback. We are excited that SMUD's Employee Giving season is in full swing. The big SMUD Giveback runs through December 9th. It is a three-month long focus on volunteerism, employee giving and fundraising. Last year, our employees raised \$383,000 for local nonprofits. This year's fundraising goal is \$418,000. The generosity of our employees is inspiring and needed. We know our local nonprofits are still hurting and every hour or dollar donated makes a big difference. We are so grateful for the work of the SMUD Cares Team.

4) Christo Rey High School Rooftop Solar System. Speaking of giving back, we were thrilled to outfit local high school Christo Rey with a new rooftop solar system. As we all know, a crucial piece of our 2030 Zero Carbon Plan is bringing the entire community along with us. Christo Rey High School is a private

school catering specifically to students from under-resourced communities. Thanks to our partnership, the school is now set with a 137-kilowatt system – which should help Christo Rey save more than \$28,000 each year. This work is in perfect alignment with our purpose – reducing emissions and investing in our community. Thanks to all who worked to make this happen.

5) **Awards.** Lastly, SMUD continues to rank among the best in a variety of fields. The awards keep coming in! Station G, our new electrical substation in downtown Sacramento, received recognition from the *Sacramento Business Journal* in its Best Real Estate Projects of 2022 Awards. Forbes announced their top employers by state, and SMUD came in as the top employer in the utility industry in California – ranking #23 overall on the list of best employers in the state. Our Chief Zero Carbon Officer Lora Anguay received recognition from the Sac Cultural Hub Media Foundation for her dedication to our 2030 Clean Energy Vision. She was named a 2022 Exceptional Woman of Color honoree. At a recent Cloud for Utilities summit, I had the pleasure of accepting the 2022 Customer Innovation Icon Award on behalf of the Sustainable Communities program. And, I was also very thrilled and surprised to receive the 2022 CEO of the Year award from Cloud for Utilities. I am so proud of our entire team.

6) **Board Video.** Tonigh’s video highlights how SMUD is providing safe, reliable power as well as educating our customers on how to create a sustainable future.

President Rose requested the Summary of Board Direction.

General Counsel Lewis stated that staff would follow up with

Mr. Boll.

Vice President Sanborn briefly commented that the Board Video made her remember an article that had come out that day stating that gas stoves are emitting a chemical unhealthy for air even when not in operation. She stated it was another good reason to switch to induction stoves.

No further business appearing, President Rose adjourned the meeting at 6:35 p.m.

Approved:

President

Secretary

From: dc.derekcressman.com
To: [Public Comment](#)
Subject: [EXTERNAL] Public comment regarding agenda item 11
Date: Thursday, October 20, 2022 12:41:47 PM

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am wondering what the cost per kilowatt hour is for the power purchase and wheeling/distribution of the power that SMUD is buying to replace the power that would have been generated by the Cosumnes Power Plant.

Thank you,

Derek Cressman

Exhibit to Agenda Item #19

Provide the Board with SMUD's financial results from the eight-month period ended August 31, 2022.

Board of Directors Meeting

Thursday, October 20, 2022, scheduled to begin at 5:30 p.m.

Virtual Meeting (online)

August 2022 Financial Highlights

<div>\$135 Million</div> <div>“Net Income”</div> <div>Net position YTD</div> <div>Favorable compared to budget</div>	<div>\$1,097 Million</div> <div>Customer Revenue</div> <div>\$50M or 4.8% higher customer revenues than budgeted (favorable)</div> <ul style="list-style-type: none"> \$63M higher than target primarily due to higher customer usage & lower bad debt expense Offset by \$13M reduction in commercial customer revenues due to overstatement of 2021 estimated unbilled revenues
	<div>\$531 Million</div> <div>Commodity</div> <div>\$175M or 49.3% higher commodity expenditures than budgeted (unfavorable)</div> <ul style="list-style-type: none"> Purchased power higher due to increased load, reduced hydro, and thermal generation down due to Cosumnes power plant outage Non-cash revenue transfer from Hydro Rate Stabilization fund of \$25 million will offset increased purchased power costs from lack of hydro
	<div>\$360 Million</div> <div>Other Operating Expenses</div> <div>\$19M or 4.9% lower expenditures than budgeted (favorable)</div> <ul style="list-style-type: none"> Customer expenses & program costs - \$18M lower primarily due to lower transportation electrification expenses and supply chain issues leading to delay in participation in customer programs Public Good \$5M lower primarily from less participation in energy efficiency programs, due to slower economic recovery in the commercial sector Offset by \$4M higher Transmission and Distribution maintenance expenses - primarily due to higher distribution maintenance underground line & station equipment expenses
	<div>\$120 Million</div> <div>Non-cash Expenses</div> <div>\$59M or 33.0% lower non-cash expenses than budgeted (favorable)</div> <ul style="list-style-type: none"> Accounting Governmental Accounting Standards Board required journal entries for pension

* There are \$49M other net revenues and expenses not included in the highlights above – primarily \$25M transfer from the Hydro rate stabilization fund

August 2022 Energy Sources



Hydro generation was 49% lower than budget in August, and 34% lower than budget year-to-date.

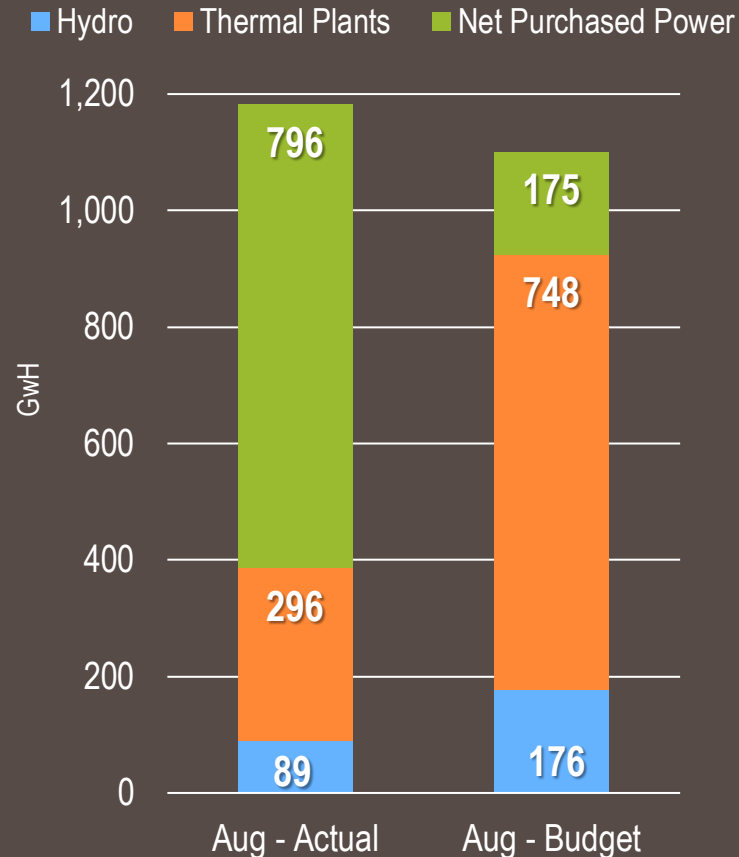


Thermal plants generation 60% lower than budget for August due to the Cosumnes power plant outage, and 34% lower than budget year-to-date.

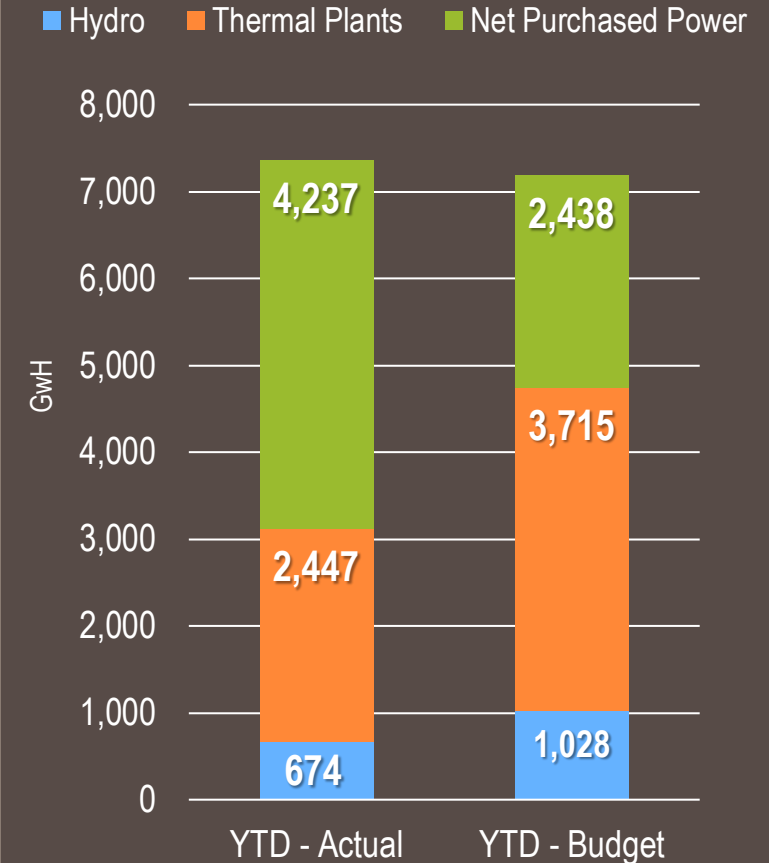


Net purchased power was 355% higher than budget for August due to purchase of replacement power for the Cosumnes power plant, and 74% higher year-to-date due to higher load and the shortfall of hydro & thermal.

August 2022 Month-to-Date

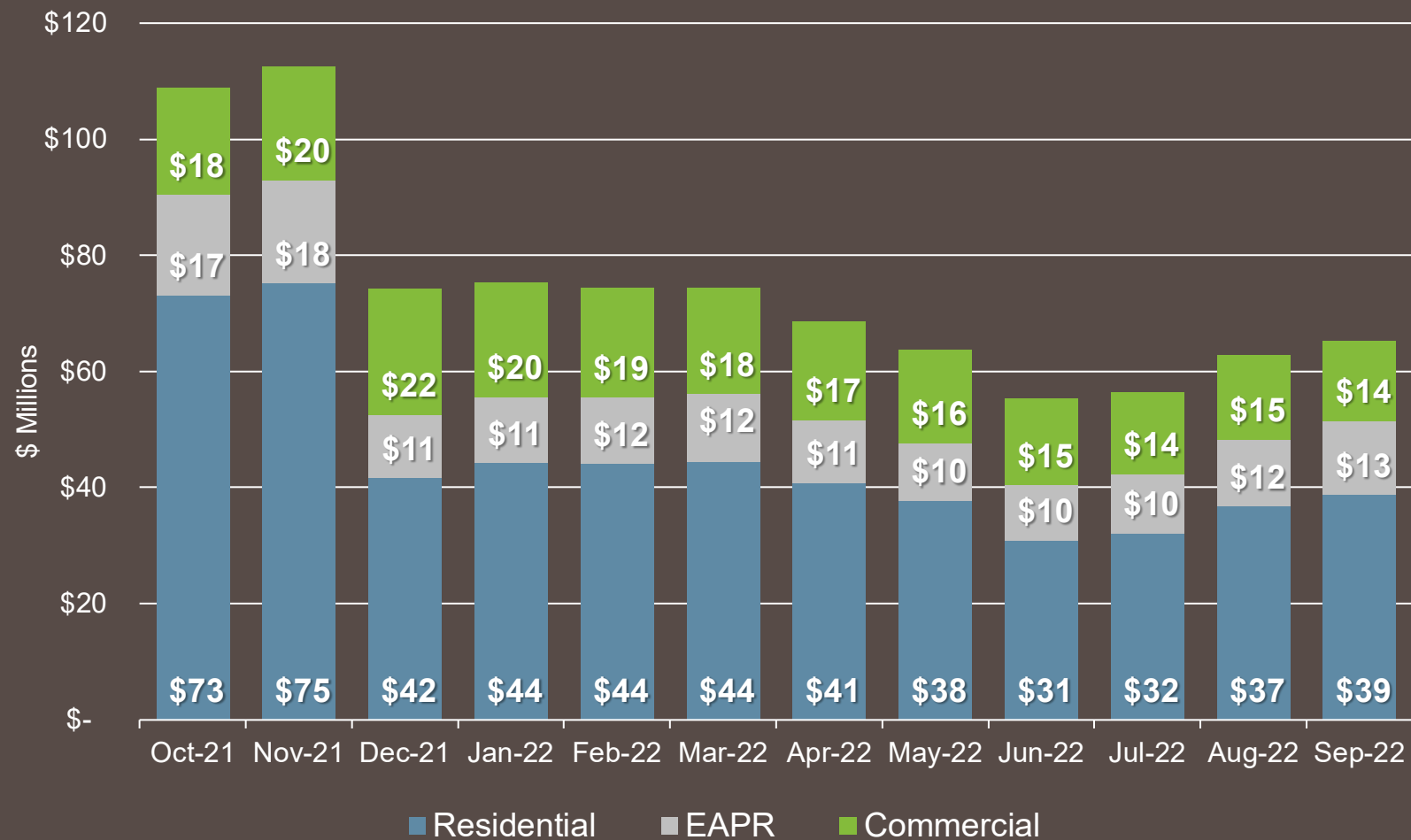


August 2022 Year-to-Date



Delinquency by Account Type

As of September 30, 2022



Delinquency Summary as of 9/30/2022		
	Delinquency (millions)	Number of Customers
Residential	\$38.7	114,821
Energy Assistance Program Rate (EAPR)	\$12.9	32,619
Commercial	\$13.7	8,961
All other (St. Lighting, Night Light, Agriculture)	\$ 0.8	1,489
Totals	\$66.1	157,890

From: [Wroten Family](#)
To: [Public Comment](#)
Subject: [EXTERNAL] Off Agenda Public Comment for October 20th Board of Directors Meeting
Date: Monday, October 10, 2022 11:59:11 AM
Attachments: [Complaint Letter to SMUD.pdf](#)

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please see the attached letter for my public comment for this meeting.

-Elizabeth Wroten

Dear Boardmembers,

I am writing about deeply concerning incidents my family had and is having with one of your supervisors. I feel this needs to be brought to the attention of people higher up than this employee. Unfortunately he has been very uncooperative in giving us information about who he is and who he reports to so I feel I am left with little recourse but to send this to several places in the SMUD organization. In addition to an initial incident, this supervisor has attempted to harass my family and escalate things and I don't really know how to get him to stop without bringing it to the attention of the people who sit at the top of the organization.

On the night of Saturday, September 17th at 10:40 PM our doorbell rang. In retrospect my husband is unsure why he answered the door as we were both asleep and typically would not open our door so late. On our porch was a single man wearing a high visibility vest and hard hat. He had was wearing no identification, no name tag or badge, nor was he wearing any clothing that identified if he worked for a company of any kind other than the unbradnded high visibility vest. He had parked his truck across the street in front of our neighbors' which was mostly obscured by our tree and fence.

He claimed to be a contractor for SMUD and was demanding to be let into our backyard. The only identification he offered was verbally saying he was a contractor for SMUD. After ten minutes of arguing with him that he was neither allowed into our backyard nor that we had any reason to believe he was associated in any way with SMUD, he offered to get a business card from his truck that showed he worked for a tree company. When I told him a business card for another company was not proof of his association with SMUD, he dialed a phone number on an iPhone he had in his pocket. The phone had a simple black case on it, but in no way indicated it was a work phone (which he later claimed it was).

A man answered and continued to insist we let this person into our backyard and that he, the man on the phone, was a SMUD supervisor. The man on the phone also refused to do more than verbally insist that he too worked for SMUD. He did not offer his name, nor his SMUD ID number. I told him we have an affidavit on file with SMUD that says we maintain our tree and not SMUD and that if he worked for SMUD he should be aware of that. He was not. Nor could he tell us our names (which are on our account), or give us any proof that he had access to information about our SMUD account.

He kept repeating that our power was out and *our* tree was touching the power lines. Neither of those things were true. We were standing on our well-illuminated porch looking out over the sweep of our street at nine other well-lit houses. I went into the backyard and took a video showing there was no sparking or arcing occurring with our tree either. In addition from our backyard we could clearly see other trees also close to touching both the high-voltage and lower voltage lines and that no arcing was occurring with those either. So the claim that it was specifically our tree was unsubstantiated. It was also implausible that the one lone man on our porch was going to enter our backyard by himself to prune our tree, or any other tree, in the

dark in the middle of the night. It was very clear that the immediate need to trim the tree late at night was not there and could wait until daylight hours.

I finally said "How do I know you are who you say you are?". The man on the phone responded "I'm sorry you feel that way." We can momentarily set aside the misogyny in this comment, and I would like to point out that this situation had everything to do with the safety of my family (my two young children were inside my house asleep) and my legal right to know that the person asking for admittance into my darkened backyard in the middle of the night is who he says he is. Under no circumstances is this an unreasonable request and his annoyance did not invalidate my feelings of skepticism and distrust.

It was now after 11:00 PM and neither person had offered any tangible or convincing proof that they were actually associated with SMUD. No other SMUD employees had arrived at our house. It took a full 20 minutes before your supervisor begrudgingly said "I could get in my SMUD truck with my SMUD ID and drive to your house but it's going to take an hour and a half." His tone that indicated he did not intend to do this nor did he want to do this. His hour and a half estimate for arrival was also clearly a bid at deterring us from insisting on his showing up as it would have put him on our doorstep at 12:30 AM or later.

He never did show up that night. Somewhere around this time he again begrudgingly conceded to calling "dispatch" (his word) to get our information and then had the contractor hang up and go back to his truck. It took him another 15 minutes to call my husband back on his phone. Even after this direct phone call he did not offer a SMUD ID number or any other form of SMUD identification. My husband insisted he come back the next morning as there was no emergency as the supervisor claimed.

I understand questions arise of why we opened the door and spent time arguing with men who, to all appearances, were not there for any legitimate utility work or for any benign reasons. I cannot offer an answer even for myself except that it was late at night, we were woken from a deep sleep and had spent the prior two nights and days caring for both our sick children. People do not always make the most logical decisions in stressful and frightening situations and hindsight makes those not there doubt the veracity of anything the victim says. However, our confusion does not negate our right to protect ourselves and expect SMUD employees to follow company policy in identifying themselves when they are very reasonably being doubted.

Also pertinent to our skepticism was the fact that three days prior we had gotten a door hanger letting us know SMUD would be in our area in the next 4-8 weeks for tree pruning. With the affidavit we have on file with SMUD we are always contacted by the SMUD employee who oversees this and they come sign off on the tree pruning our arborist does. We had no reason to expect SMUD to be at our house for pruning until the timeline given on the doorhanger and we certainly had no reason to believe they would be on our doorstep at 10:30 PM on a Saturday.

The supervisor should have called before dispatching a contractor. Barring that he should have immediately offered to call us back on the phone number associated with our account. He could

also have pointed us to the fraud alert page on your website, telling us there was a number there that we could call to independently verify that the contractor was supposed to be there. (I will note I only found this page *after* the incident occurred and not because he pointed us to it.) And according to this page you have company policy around how SMUD employees and contractors should behave if they come to a customer's home. From your website:

- SMUD field crews carry photo identification cards at all times. If you are in doubt, ask to see an ID card. A true SMUD employee will be happy to show it to you.
- SMUD employees will drive a SMUD vehicle and wear clothing that shows the SMUD logo.
- Ask for a name, SMUD employee number and supervisor's name and call one of the phone numbers above to verify the field worker's identity.

Neither of these individuals met your own stated policy and only begrudgingly did the bare minimum to reassure us after 45 minutes of arguing and refusing them access to our property.

I would also like to bring back the sexism in the supervisor's comment to me about my feelings in a situation that was both suspect and dangerous. Women are often accused of being emotional as a way to dismiss their very real concerns and frankly that is exactly what this supervisor was trying to do. It is unacceptable to me that SMUD has a man who feels comfortable telling a woman that a strange person on her doorstep at 10:40 at night who refuses to show any actual proof of his identity is not a very real concern.

This was an unacceptable situation that included a supervisor going against company policy, a supervisor lying to customers to gain access without first reassuring the customer of his identity, and deeply misogynistic behavior.

The next morning the supervisor did eventually arrive and identified himself as "Eric". We were never shown his SMUD identification badge or given his ID number despite the very valid concerns we had about who he was the night before. At this point I have zero confidence in SMUD and this employee. My point in laying all this out is that you are employing a supervisor who has callous disregard for the people who he supervises and also for your customers' rights and your own company policy. This supervisor is clearly willing to send his employees into potentially dangerous situations where homeowners do not know he is a SMUD employee or contractor. I can tell you had he entered our backyard without first making contact with us, that I would have contacted law enforcement and physically stopped him myself while waiting for the sheriff to arrive. My children were inside the house and I will not let strange men wander my backyard at any time of day putting their safety and my own at risk. I do not think anyone reading this would do any less for their own safety or the safety of their families. It's not unreasonable to question the situation we were in. We were all in danger in this situation because of the cavalier attitude of your supervisor.

Since writing the first part of this letter several additional deeply concerning things have happened. We have finally found out the name of the SMUD supervisor, Eric Brown, and that he

is the head of the vegetation department. We have also become aware of a clear lack of communication in his department and this supervisor is now attempting to harass us.

We only know his full name because one of his employees showed up a week later to follow up on the pruning doorhanger we got and was able to tell us his name. And we only know his ID number because he has called to harass us. During a call initiated by Eric Brown, it still took my husband arguing with him and explaining the company policy to get him to give his ID number. Again, company policy requires that employees provide it upon request and will do so willingly i.e. without arguing. It appears this supervisor still believes himself to be above upholding company policy.

A week after the initial incident, again on a Saturday, James La Plante arrived at our house unaware that anyone from his own department had been to our house to prune our tree. He was both apologetic for how we were treated by his supervisor and was also clear that if a pruning crew had already come by he would not need to revisit the tree. He was aware of the affidavit we have on file and our previous eight years of acceptable tree care we have provided (the vegetation department has signed off on our care each time they have come out to do their own pruning). We offered to let him into our yard so he could see the job done by Eric Brown's crew, but he said it was unnecessary. Clearly no one had communicated with him that our tree had been pruned or that he would need to sign off on the job or, as Brown is now insisting, more pruning needs to be done.

Eric Brown is now trying to claim we have not allowed SMUD onto our property to prune our tree to SMUD's specification and that he needs to prune the tree further, which makes no sense. Why would they not have performed what was needed while they were on the property and made it so they have to make another trip? He called my husband and told him he will have to have your legal department write us a letter about how we aren't allowing them onto the property. His claim that we won't let SMUD onto the property is an outright lie. His threat of baseless legal claims constitutes harassment and bullying.

Not only do we have video proof that SMUD came and pruned our tree, and others along the line, that Sunday morning, but I am also sure that there is a record of that pruning somewhere in SMUD's files. Despite the considerable damage the unskilled pruners did, we at no point told SMUD they had to leave our property and they spent hours pruning. We protested their poor job but Brown did what he wanted to do while telling us he was listening to and addressing our concerns. He did neither and pruned exactly as he wanted to with no regard to how the tree will regrow and cause the same problem again. His repeated statement of "we are performing proper pruning procedures" without explaining what those were left us frustrated we now have to take on additional personal cost to have our arborist correct the damage to our tree.

When James La Plante came to discuss his routine pruning we offered several times to have him go into the yard and check the previous crew's work, which he declined to do. So it's unclear in what capacity SMUD is being denied access. Brown's contacting us to threaten legal action is

completely unwarranted. I called Brown back and made it very clear that he is not welcome to contact us again in regards to this false claim he is making.

I also find it necessary, because Brown is implying we are not upholding our end of the affidavit, to note that SMUD comes to our property and neighborhood about once every 2-3 **years** to prune back the trees that interfere with the power lines. We hire, at our own expense, a certified arborist who comes and cares for our tree once every 12-18 **months**, (most recently in May of this year) and have done so for eight years since filing our affidavit. We do a significantly better and more consistent job of ensuring our tree does not interfere with SMUD's power lines than SMUD itself does. Our arborist also prunes the tree in a way that encourages growth away from the lines to the best of his ability and to maintain the overall health of the entire tree. When SMUD pruned our tree eight years ago, and a few weeks ago, they did so in a way that guarantees the tree will grow back into the lines within one season.

It is unacceptable to me that a SMUD employee who has been given power and oversight is being allowed to flaunt company policy in regards to how he engages with customers, that he feels free to engage in misogynistic behavior toward female customers, and feels free to harass and bully customers with baseless legal claims. I do not know what his motivations are, but this needs to stop and my family needs to be left alone. It is also unclear why the head of your entire vegetation department is concerning himself with one single tree in the Sacramento area. The department is not small or lacking in other, better-suited employees to make sure a tree gets pruned.

SMUD is welcome to continue the relationship we have with our affidavit where we care for our tree regularly and more frequently than SMUD in order to ensure SMUD's lines are clear and our tree will not need to be removed because of the careless job SMUD's tree crews do. Frankly, this is a win-win situation for SMUD and my family.

I know this was a long letter and it is not pleasant to read or listen to long complaints but I do appreciate that you have read this far and thank you for hearing me out.

Elizabeth Wroten
2338 Catalina Drive
Sacramento, CA 95864

From: [Michael Garabedian](#)
To: [Public Comment](#)
Subject: [EXTERNAL]
Date: Thursday, October 20, 2022 7:14:03 PM

CAUTION: This email originated from outside of SMUD. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Unsuccessful effort to make a public comment after visiting headquarters, including then online by phone a lot of repeated downloads of the agenda. This is now an effort to make a record of this effort.

Subject: The October 13, 2022, Placer County Planning Commission agenda on the misleadingly named SMUD "Country Acres Solar Project" failed meeting on the DEIR for the project about which there was no presentation October 13 showing and describing the environmental impacts of the project by the County or SMUD, and that a new public meeting needs to be scheduled before comments on the DEIR are due. It seems a gross error in judgement if not legal procedural violation of CEQA making a bit of a mockery of it to not show by map and photo what the impacts are.

Further, SMUD by this project so far accepts Placer County's Placer County NCCP/HCP Placer Conservation Plan so far making SMUD a proposer of wanton destruction of farm land by fragmenting five square miles of it and wanton habitat destruction.

Michael Garabedian
Placer County Tomorrow
916-719-7296

Sacramento, California

November 2, 2022

The Board of Directors of the Sacramento Municipal Utility District met in special session via virtual meeting (online) at 5:33 p.m.

Roll Call:

Presiding: President Rose

Present: Directors Fishman, Herber, Kerth,
Tamayo (5:34 p.m.), and Sanborn

Absent: Director Bui-Thompson

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

President Rose called for approval of the agenda. Director Herber moved for approval of the agenda, Director Fishman seconded, and the agenda was approved by a vote of 6-0, with Director Bui-Thompson absent.

President Rose then called for public comment for items on the agenda, but none were forthcoming.

President Rose announced the Board would enter into closed session to discuss the following items:

1. **Conference with Real Property Negotiators.**

Pursuant to Section 54956.8 of the Government Code:

Property: Land in the **Solano Wind Resources Area**
[APNs 0090-100 (-130, -370, -390, -410); 0090-120-300; 0090-130 (-070 to -200, -220, -370); 0090-140 (-110, -160, -170); 0900-180 (-030 to -050, -070, -240, -260, -270); 0900-190 (-040, -090, -100, -210, -220); 0090-210-010; 0090-220 (-020, -050, -150 to -180, -210, -300)]

SMUD Negotiators:

Joe Schofield, Deputy General Counsel
Buck Cutting, Manager of Project Development and Renewable Generation Assets
Ellias van Ekelburg, Director of Environmental, Safety & Real Estate Services
Gretchen Hildebrand, Land Specialist

Negotiating Party:

Flannery, LLC

Under negotiation: price and terms.

Conference with Legal Counsel – Existing Litigation (Arbitration).

Pursuant to Section 54956.9(d)(1) of the Government Code:

McMillen Jacobs Associates v. Sacramento Municipal Utility District.

The Board entered into closed session at 5:36 p.m.

Vice President Sanborn re-opened the meeting at 7:01 p.m. and announced that President Rose had left the meeting (6:53 p.m.). She then reported that the Board provided direction to staff regarding the price and terms of the proposed property transaction regarding the Solano County Wind Resources Area Property. She stated the Board also provided authority to staff regarding settlement of the pending claim by McMillen Jacobs Associates.

Vice President Sanborn then addressed Discussion Calendar Item 3, to make findings that the sale of the fee interest in Land within the Solano Wind Resources Area is exempt from the Surplus Land Act in light of exchanged land rights and furtherance of SMUD's energy generation, storage and transmission purposes.

Joe Schofield, Deputy General Counsel, gave a presentation on Discussion Calendar Item 3. A copy of the slides used in his presentation are attached hereto.

No public comment was forthcoming on Discussion Calendar Item 3.

After some discussion, Director Fishman moved for approval of Discussion Calendar Item 3, Director Herber seconded, and Resolution No. 22-10-18 was approved by a vote of 5-0, with President Rose and Director Bui-Thompson absent.

RESOLUTION NO. 22-10-18

WHEREAS, the **California Surplus Land Act** (the Act) states that a “local agency” such as SMUD may only sell “land owned in fee simple ... for which the local agency’s governing body takes formal action in a regular public meeting declaring that the land is surplus and is not necessary for the agency’s use”; and

WHEREAS, the Act provides for a local agency’s governing body to designate such surplus land as “exempt surplus land,” with designated exemption classifications including sales that directly further the express purpose of the agency’s work and operations or land that a local agency is exchanging for another property necessary for the agency’s use; and

WHEREAS, SMUD owns the fee interest in 6,129.7 acres of land in Solano County [APNs 0090-100 (-130, -370, -390, -410); 0090-120-300; 0090-130 (-070 to -200, -220, -370); 0090-140 (-110, -160, -170); 0900-180 (-030 to -050, -070, -240, -260, -270); 0900-190 (-040, -090, -100, -210, -220); 0090-210-010; 0090-220 (-020, -050, -150 to -180, -210, -300)] located in the **Solano Wind Resources Area (Solano Property)**; and

WHEREAS, virtually all of the **Solano Property** is subject to long term grazing and dry cropping leases with renewal options; and

WHEREAS, SMUD needs and will continue to need the **Solano Property** to support wind, solar, storage and transmission needs, which are vital to the express purpose of SMUD’s work and operations; and

WHEREAS, these needs are amply described in SMUD’s **2030 Zero Carbon Plan**; and

WHEREAS, all other wind developers in the **Solano Wind Resources Area** rely on easements to operate their projects, with SMUD being the sole owner of the fee estate; and

WHEREAS, staff recommends selling the fee interest while concurrently securing a perpetual cost-free easements in addition to easement rights on property that neighbors the **Solano Property (Third Party Easements)**; and

WHEREAS, the **Third Party Easements** are vital to the development of both the **Solano 4 Wind Project** and the future repowering of the **Solano 2 Wind Project**. SMUD could not, in fact, develop these projects without the easements. SMUD could potentially obtain the **Third-Party Easements** through eminent domain but SMUD staff has confirmed they could not be obtained through willing sale. The neighboring landowner's special counsel sent a letter to SMUD's Legal Department confirming their position that they would aggressively defend a condemnation lawsuit to secure the easements and would expect to be successful; and

WHEREAS, the **Solano 4 Wind Project** and the future repowering of the **Solano 2 Wind Project** are critical to the express purpose of SMUD's work and operations, including its efforts to decarbonize the grid and combat the climate crisis; and

WHEREAS, a purchase and sale agreement for the **Solano Property** would prohibit the fee owner's use in a manner inconsistent with SMUD's needs including, but not limited to, prohibitions against residential development or construction on the property that could meaningfully impede wind to the turbines, and would transfer to the buyer long term grazing and dry cropping leases encumbering virtually all the **Solano Property**; and

WHEREAS, staff recommends the **Solano Property** be declared exempt surplus land; **NOW, THEREFORE**,

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

Section 1. That this Board finds that the sale of the fee interest in the **Solano Property** directly and substantially furthers the express purpose of SMUD's work and operations. This is demonstrated through the rights SMUD will secure as part of the sale for the use of the property in perpetuity for wind, solar, storage and transmission purposes at no cost to SMUD, as well as the substantial easement rights on other, private property that are necessary for SMUD to develop the **Solano Property** for the Solano 4 Project and to redevelop the Solano 2 Project at a critical date.

Section 2. That this Board finds that the sale of the fee interest includes an exchange of the fee interest in the **Solano Property** for other property interests necessary for SMUD's use. To acquire these rights otherwise would require a condemnation lawsuit or lawsuits, and the owner's counsel forcefully contends they could successfully defend such actions.

Section 3. That this Board declares the 6,129.7 acres of land in Solano County [APNs 0090-100 (-130, -370, -390, -410); 0090-120-300; 0090-130 (-070 to -200, -220, -370); 0090-140 (-110, -160, -170); 0900-180 (-030 to -050, -070, -240, -260, -270); 0900-190 (-040, -090, -100, -210, -220); 0090-210-010; 0090-220 (-020, -050, -150 to -180, -210, -300)] located in the **Solano Wind Resources Area (Solano Property)** is exempt surplus land.

Approved: November 2, 2022

INTRODUCED: DIRECTOR FISHMAN				
SECONDED: DIRECTOR HERBER				
DIRECTOR	AYE	NO	ABSTAIN	ABSENT
ROSE				X
BUI-THOMPSON				X
FISHMAN	X			
HERBER	X			
KERTH	X			
TAMAYO	X			
SANBORN	X			

Vice President Sanborn then turned to agenda item 4, 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 for agenda item 4.

No further business appearing, Vice President Sanborn adjourned the meeting at 7:09 p.m.

Approved:

Vice President

Secretary

Exhibit to Agenda Item #3

Make findings that the sale of the fee interest in Land within the **Solano Wind Resources Area** is exempt from the Surplus Land Act in light of exchanged land rights and furtherance of SMUD's energy generation, storage and transmission purposes.

Special Board of Directors Meeting

Wednesday, November 2, 2022, scheduled to begin at 5:30 p.m.

Virtual Meeting (online)

AB 1486 SURPLUS LAND ACT

AB 1486, as of 2000, made many changes to the Surplus Land Act, one being to define surplus land only as “land owned in fee simple by any local agency for which the local agency’s governing body takes formal action in a regular public meeting declaring that the land is surplus and is not necessary for the agency’s use.”

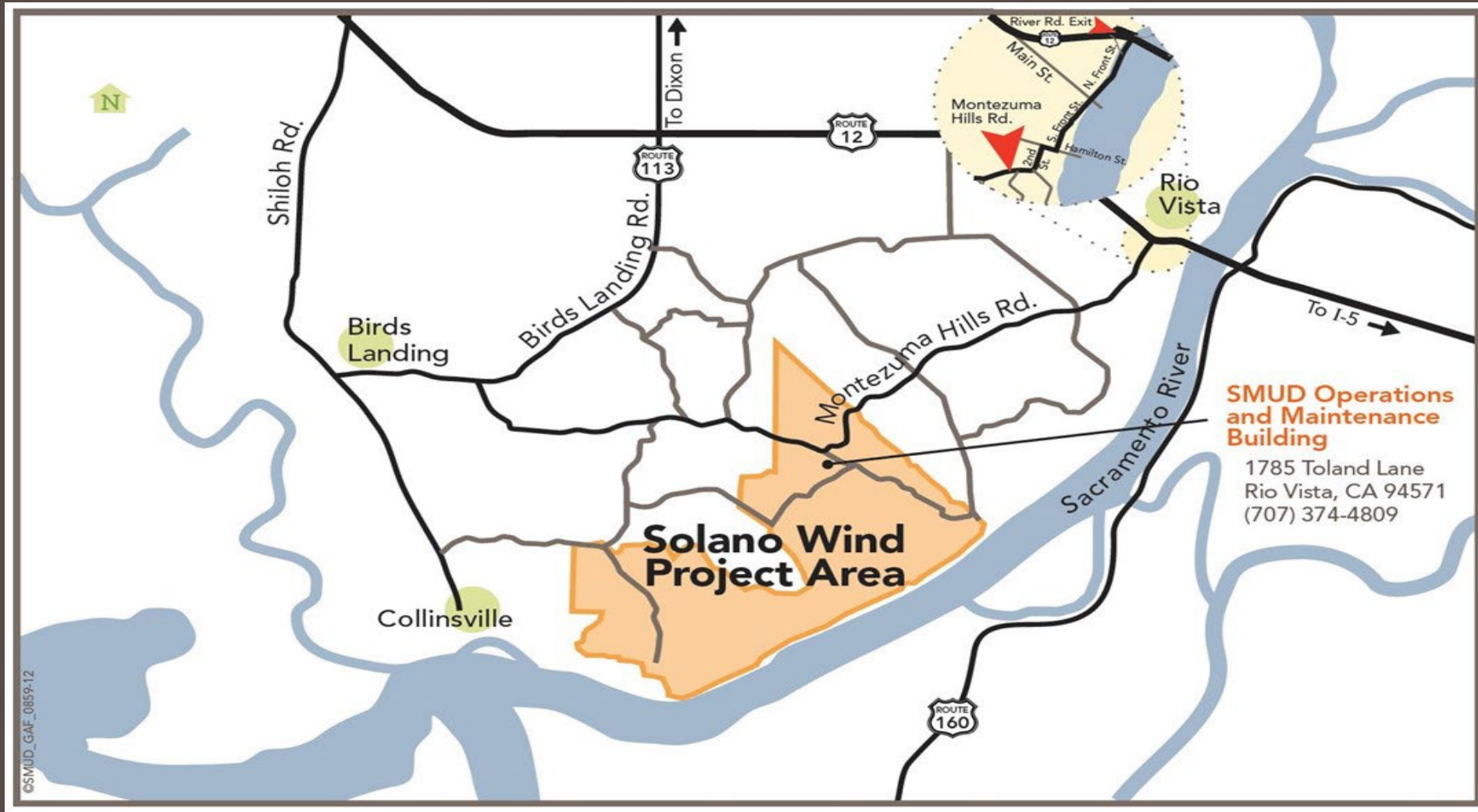
The surplus declaration must be supported by written findings.

Surplus land includes so-called exempt surplus land.

Solano Property

- SMUD owns the fee interest in 6,129.7 acres of land in Solano County, located in the Wind Resource Area.
- SMUD purchased the property over time for use with the Solano Wind Projects 1, 2, 3 and 4.
- The property is within the line of site of Travis Air Force Base radar system.
- Virtually all of the property is subject to long-term grazing and dry cropping leases with renewal options.





©SMUD_GAF_0859-12

**SMUD Operations
and Maintenance
Building**
1785 Toland Lane
Rio Vista, CA 94571
(707) 374-4809

Solano Property Sale

- SMUD needs and will continue to need the Solano Property to support wind, solar, storage and transmission needs.
- But SMUD is considering converting the fee interest to easement interests that will not only meet those needs but improve our ability to meet them by gaining additional easement rights on third-party property.
- The buyer would not be able to use the Solano Property in a manner that would be inconsistent with SMUD's needs, e.g., no residential development or construction that could meaningfully impede wind to the turbines.
- The long-term grazing and dry cropping leases would transfer to the buyer.
- Terms are still under negotiation.

Solano Property Surplus Declaration

The Solano Property is not surplus in the common meaning of the term.

But the Surplus Land Act requires making findings that the land is surplus before selling it.

However, the Act's requirement for a surplus declaration can be met by finding the property is "exempt surplus land," which covers when the land is to for the public entity's use and when land is being exchanged.

Solano Property Surplus Declaration

The following both individually and collectively support a finding that the Solano Property qualifies as exempt surplus property under the Surplus Land Act:

- (1) The sale of the property directly and substantially furthers SMUD's work and operations. This is manifest in the detailed rights SMUD will secure as part of the sale for the use of the property in perpetuity for wind, solar, storage and transmission purposes.
- (2) The sale includes exchanging a fee interest for other property necessary for SMUD's use. This exchange will include acquiring vital permanent easements outside of the Solano Property that will enable SMUD to develop the Solano 4 Project and repower the Solano 2 Project, and in the future to repower all of SMUD's wind assets with the ability to collect and transmit the energy. The deal also includes additional types of easements outside the Solano Property. To acquire these rights otherwise would require a condemnation lawsuit or lawsuits, and the owner's counsel forcefully contends they could successfully defend such actions.

Requested Action

Staff recommends the Board declare the Solano Property as Exempt Surplus Property, allowing SMUD to sell the fee interest in the property, while securing permanent rights in the property and in neighboring property consistent with SMUD's ongoing and future needs.

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Finance & Audit – 11/15/22Board Meeting Date
November 17, 2022

TO					TO							
1.	Tasha Crawford				6.	Jennifer Davidson						
2.	Robert Adams				7.	Lora Anguay						
3.	Cheryl Spector				8.	Scott Martin						
4.	Laurie Rodriguez				9.	Legal						
5.	Casey Fallon				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) Andrew McDermott					DEPARTMENT Procurement					MAIL STOP EA404	EXT. 5862	DATE SENT 10/21/22

NARRATIVE:

Requested Action: Approve Contract Change No. 2 to Contract No. 4500099793 for Workers' Compensation & Short Term / Long Term Disability Third Party Claims Administration Services with Intercare Holdings Insurance Services, Inc. (Intercare) to extend the contract expiration date by two years from December 31, 2022, to December 31, 2024, and increase the contract not-to-exceed amount by \$1 million, from \$2.12 million to \$3.12 million.

Summary: This contract was awarded on a competitive basis to Intercare in March 2017 through Board Resolution No. 16-12-06. The original contract was awarded for the period of March 15, 2017, to March 14, 2022, for a not-to-exceed amount of \$1,825,800. Contract Change No. 01 extended the contract expiration date to December 31, 2022, and increased the contract by \$294,200 for a new, not-to-exceed amount of \$2,120,000 (Board Resolution No. 21-10-08). Contract Change No. 02 is requested to extend the expiration date to December 31, 2024, and increase the contract by \$1,000,000 for a new not-to-exceed amount of \$3,120,000. There is a regular monthly spend of \$30,000 for this service and this additional funding will cover through December 2024, which will allow SMUD's People Services & Strategies (PS&S) department to enhance the short-term and long-term disability benefits to continue to support SMUD's diverse workforce. Proposed rates for this change include a 3% increase which aligns with the contracted escalation rate and is significantly lower than the current rate of inflation of approximately 9% per Consumer Price Index for All Urban Consumers (CPI-U) U.S. city average series for all items, not seasonally adjusted.

SMUD is self-insured for our Workers Compensation (WC) program, and self-funded for the Short-Term Disability (STD) and Long-Term Disability (LTD) benefit plans. Intercare has been providing claims administration services to SMUD since they were awarded a contract through a competitive solicitation in 2013. PS&S and Procurement Staff determined that a contract extension with Intercare was the best way to provide consistency of benefits to our employees near-term while we continue to analyze the best path forward for administering SMUD's STD/LTD, WC and potentially Paid Family Leave (PFL) benefits long term.

Currently, the contract balance is approximately \$182,000.

Contract Actions	Amount	Cumulative Total	Description
Original Contract	\$1,825,800	\$1,825,800	
Change No. 01	\$294,200	\$2,120,000	Increased NTE and extended expiration
Pending Change No. 02	\$1,000,000	\$3,120,000	Increases NTE and extends expiration

Board Policy: <i>(Number & Title)</i>	Board-Staff Linkage BL-8, Delegation to the Chief Executive Officer and General Manager with Respect to Procurement; Strategic Direction SD-8, Employee Relations; Strategic Direction SD-6, Safety Leadership
Benefits:	Will ensure SMUD continues to receive satisfactory services and remains compliant with all the California Worker’s Compensation laws and STD/LTD claims
Cost/Budgeted:	\$1,000,000; Budgeted for 2023-2024 by People Services & Strategies.
Alternatives:	Not approving the contract change would not allow PS&S to enhance the long-term and short-term disability benefits and could result in a lapse of service. This is not the desired route for the business unit.
Affected Parties:	People Services & Strategies, Procurement, Intercare Holdings Insurance Services, Inc.
Coordination:	People Services & Strategies and Procurement
Presenter:	Laurie Rodriguez, Director, People Services & Strategies

Additional Links:

SUBJECT	Contract Change No. 02 for Intercare Holdings Insurance Services, Inc.	ITEM NO. (FOR LEGAL USE ONLY) 7
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, by Resolution No. 16-12-06 adopted on December 1, 2016, this Board awarded Contract No. 4500099793 to **Intercare Holdings Insurance Services, Inc. (“Intercare”)** for Workers’ Compensation (“WC”) & Short Term / Long Term Disability (“SDT/LTD”) Third Party Claims Administration Services for a five-year period beginning March 15, 2017, to March 14, 2022, in the not-to-exceed amount of \$1,825,800; and

WHEREAS, by Resolution No. 21-10-08 adopted on October 21, 2021, this Board approved Contract Change No. 1 to extend the contract expiration date to December 31, 2022, and increase the contract amount by \$294,200, from \$1,825,800 to \$2,120,000; and

WHEREAS, there is a regular monthly spend of \$30,000 for this service, and this additional funding will cover through December 2024; and

WHEREAS, additional funding and time will allow SMUD to provide consistency of benefits to employees while staff continues to analyze options for optimal administration of current and future benefits; **NOW, THEREFORE,**

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

Section 1. That this Board approves Contract Change No. 2 to Contract No. 4500099793 with **Intercare Holdings Insurance Services, Inc.** for Workers’ Compensation & Short Term / Long Term Disability Third Party Claims Administration Services to extend the contract expiration date by two years from December 31, 2022,

to December 31, 2024, and increase the contract not-to-exceed amount by \$1,000,000, from \$2,120,000 to \$3,120,000.

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.

SSS No. SCS-22-303

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Finance & Audit – 11/15/22Board Meeting Date
November 17, 2022

TO					TO				
1.	Jesse Mays				6.	Jennifer Davidson			
2.	Robert Adams				7.	Lora Anguay			
3.	Casey Fallon				8.	Scott Martin			
4.	Eric Poff				9.	Legal			
5.	Frankie McDermott				10.	CEO & General Manager			
Consent Calendar		x	Yes	No If no, schedule a dry run presentation.		Budgeted		x	Yes
FROM (IPR)		DEPARTMENT		MAIL STOP		EXT.		DATE SENT	
Katherine Manne		Procurement		EA404		6175		10/20/22	

NARRATIVE:

Requested Action: Authorize the Chief Executive Officer and General Manager to award contracts to Arrow Construction (Arrow), Sierra National Construction, Inc. (SNC), and Mountain G. Enterprises, Inc. (MGE) for Civil Annual Construction Services for a contract term of three years from November 21, 2022, to November 20, 2025, for a total aggregate contract not-to-exceed amount of \$100 million.

Summary: Request for Proposals (“RFP”) No. Doc3586798068 was issued in August 2022 to solicit for qualified firms to provide civil annual construction services. A pre-proposal conference was held on August 15, 2022. On September 9, 2022, five proposals were received and evaluated in accordance with the advertised criteria. Of the five proposals received, all were responsive. SMUD initiated negotiations with three of the responsive proposers, which resulted in a price reduction of an average of 11% for select lines items from MGE’s proposal that were found to be above the average pricing proposed by the three top-ranked proposers. The final pricing from Arrow, SNC, and MGE is highly competitive, and, coupled with their technical score, this supports the recommendation to award contracts to the three highest rated proposers. Awarding three zero-dollar contracts with an aggregate amount of all tasks non-to-exceed \$100,000,000 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: Board-Staff Linkage BL-8, Delegation to the Chief Executive Officer and General Manager with Respect to Procurement; Strategic Direction SD-4, Reliability; Strategic Direction SD-6, Safety Leadership; Strategic Direction SD-13, Economic Development Policy.

Recommendation: Award to the Highest Evaluated Responsive Proposers.

Award to:

Arrow Construction	Sierra National Construction, Inc.	Mountain G. Enterprises, Inc.
1850 Diesel Drive	5433 El Camino Ave., Ste. 4	950 Iron Point Road, Ste. 190
Sacramento, CA 95838	Carmichael, CA 95608	Folsom, CA 95630

Proposers Notified by Procurement:	24
Proposers Downloaded:	9
Pre-Proposal Conference Attendance:	7
Proposals Received:	5

Responsive Proposals Received	P/F	SEED Points 10	Technical Points 30	Price Points 60	Total Score 100	Rank	Proposal Amount	Evaluated Proposal Amount	Proposed Award Amount
Arrow Construction	P	10	30.00	58.01	98.01	1	\$103,467,173	\$103,217,173	Not-To-Exceed \$100,000,000 Aggregate Amount of all Task Authorizations
Sierra National Construction, Inc.	P	10	29.00	57.96	96.96	2	\$103,550,240	\$103,300,240	
Mountain G. Enterprises, Inc.	P	10	25.50	57.24	92.74	3	\$104,889,640	\$104,599,562	
Syblon Reid	P	10	21.00	57.71	88.71	4	\$103,995,357	\$103,745,357	
Outback Contractors, Inc.	P	0	21.25	60.00	81.25	5	\$99,788,907	\$99,788,907	

Non-Responsive Proposals Received	Proposal Amount
NA	

Supplier Diversity Program:

Arrow is a Supplier Education and Economic Development (SEED) verified vendor and was the highest ranked proposer. Arrow proposed to self-perform 99% of the work, and subcontract less than 1%. SNC is the second highest ranked proposer and is not a SEED verified vendor. However, SNC proposed to self-perform 80% of the work, and subcontract 20% to SEED verified vendors. MGE is the third highest ranked proposer and is not a SEED verified vendor. However, MGE proposed to self-perform 80% of the work, and subcontract 20% to SEED verified vendors.

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

Cost/Budgeted: \$100,000,000; Budgeted for 2022 through 2025 by Grid Assets

Alternatives: Negotiate current contracts with incumbent vendors for an extended term, and risk less competitive pricing.

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

Coordination: Grid Assets and Supply Chain Services.

Presenter: Casey Fallon, Director, Procurement, Warehouse & Fleet

Additional Links:

SUBJECT	Award Civil Annual Construction Contracts	ITEM NO. (FOR LEGAL USE ONLY) 8
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, in August 2022, SMUD issued Request for Proposal No. Doc3586798068 (RFP) to solicit qualified firms to provide civil annual construction services; and

WHEREAS, five proposals submitted 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, Sierra National Construction, Inc., and Mountain G. Enterprises, Inc.** are hereby determined and declared to be the three highest evaluated responsive proposers for civil annual construction services.

Section 2. The Chief Executive Officer and General Manager, or his designee, is authorized, on behalf of SMUD, to award contracts to **Arrow Construction, Sierra National Construction, Inc., and Mountain G. Enterprises, Inc.** for civil annual construction services for a contract term of three years from November 21, 2022, to November 20, 2025, for a total aggregate contract not-to-exceed amount of \$100,000,000.

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.

SSS No. LEG 2022-0157

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Finance & Audit – 11/15/22

Board Meeting Date
November 17, 2022

TO					TO							
1.	Jennifer Davidson				6.							
2.	Lora Anguay				7.							
3.	Scott Martin				8.							
4.					9.	Legal						
5.					10.	CEO & General Manager						
Consent Calendar		<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No <i>If no, schedule a dry run presentation.</i>		Budgeted	<input checked="" type="checkbox"/>	Yes	No <i>(If no, explain in Cost/Budgeted section.)</i>		
FROM (IPR) Joe Schofield					DEPARTMENT Legal Department					MAIL STOP B406	EXT. 5446	DATE SENT 11/03/22
NARRATIVE:												
<p>Requested Action: Make findings pursuant to Government Code section 54953(e) to continue meetings via virtual (online/teleconference) meeting for the next 30 days.</p> <p>Summary: Pursuant to Executive Order N-29-20 issued on March 17, 2020, and Executive Order N-35-20 issued on March 21, 2020, as well as the Emergency Board Meeting Procedures adopted by this Board via Resolution No. 20-06-08 on June 18, 2020, this Board has conducted regular Board meetings and other public meetings via remote (online/teleconference) meetings.</p> <p>On September 16, 2021, Governor Newsom signed Assembly Bill 361 (AB 361), which became effective immediately upon signature, containing language that eased Brown Act requirements to allow local agencies to meet remotely. AB 361 allows meetings to continue to be conducted by teleconference, similar to the process used during the current COVID-19 pandemic, but only when there is a declared state of emergency when the local governing body makes findings that there are imminent health risks to meeting in person.</p> <p>On February 25, 2022, Executive Order N-04-22 was issued making some changes to previous COVID-19 Executive Orders but leaving the California State of Emergency due to the threat of COVID-19 in effect. On October 17, 2022, Governor Newsom announced his intent to end the California State of Emergency on February 28, 2023.</p> <p>On April 21, 2022, CAL/OSHA re-adopted its workplace COVID-19 Emergency Temporary Standards (ETS), as modified, effective May 6, 2022, through December 31, 2022, including outbreak reporting; SMUD staff continue to report COVID-19 infections, though at a decreasing rate; the lack of a requirement to sign in at SMUD Board meetings with contact information could make contact tracing nearly impossible; and the most recently reported COVID-19 data published, by the Sacramento County Department of Public Health on its Epidemiology COVID-19 Dashboard, and covering the period up to November 2, 2022, indicated a local COVID-19 case rate of 6.5% and 5 deaths since the last update. Studies of COVID-19 in Sacramento County wastewater show a fairly steep rise in detections since early October. Although Sacramento County is still currently in the low severity tier for COVID-19 with surrounding counties also being in the low tiers, when SMUD Board and Committee meetings were held in person, they could last as long as four hours with all participants in a single room. And although we could space out participants, they would still be breathing one another's respirated air for what could be a lengthy period of time.</p>												

By Resolution 21-10-01 adopted on October 12, 2021, Resolution No. 21-10-03 adopted on October 21, 2021, Resolution No. 21-11-05 adopted on November 18, 2021, Resolution No. 21-12-04 adopted on December 9, 2021, Resolution No. 22-03-01 adopted on March 8, 2022, Resolution No. 22-03-03 adopted on March 17, 2022, Resolution No. 22-04-01 adopted on April 13, 2022, Resolution No. 22-04-03 adopted on April 21, 2022, Resolution No. 22-05-06 adopted on May 19, 2022, Resolution No. 22-06-02 adopted on June 16, 2022, Resolution No. 22-07-02 adopted on July 21, 2022, Resolution No. 22-08-05 adopted on August 18, 2022, Resolution No. 22-09-06 adopted on September 15, 2022, Resolution No. 22-10-01 adopted on October 12, 2022, and Resolution No. 22-10-03 adopted on October 20, 2022 this Board has previously made findings to continue to hold regular Board meetings and other public meetings via solely virtual (online/teleconference) format.

Staff's recommendation is to continue to hold regular Board meetings and other public meetings via virtual (online/teleconference) meeting or as hybrid virtual (online/teleconference/limited in-person) and continue to monitor developments related to the COVID-19 pandemic. Pursuant to Government Code section 54953(e), this Board must make findings every 30 days that conditions warrant continuing to meet virtually instead of in-person.

- Board Policy:** Governance Process GP-3, Board Job Description – j) Take such other actions as may be required by law.
(Number & Title)
- Benefits:** Making the determination to continue remote meetings will allow for efficient conduct of SMUD business.
- Cost/Budgeted:** Contained in Business Unit budget for internal labor.
- Alternatives:** Take no action and comply with all original Brown Act requirements.
- Affected Parties:** SMUD, Board of Directors, Public
- Coordination:** Executive Office, Board Office, Legal Department, Information Technology, Communications
- Presenter:** Laura Lewis, Chief Legal & Government Affairs Officer

Additional Links:

SUBJECT

Make Findings to Continue Online/Teleconference Meetings

ITEM NO. (FOR LEGAL USE ONLY)

9

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, SMUD is committed to preserving public access and participation in meetings of the Board of Directors and to the safety of meeting attendees; and

WHEREAS, all meetings of the Board of Directors are open and public, as required by the Ralph M. Brown Act (Gov't Code, §§ 54950-54963) ("Brown Act"), so that any member of the public may attend, participate in, and watch SMUD's governing body conduct its business; and

WHEREAS, the newly enacted Government Code section 54953(e) authorizes a local agency's governing body, during a proclaimed state of emergency, to participate in its public meetings using remote teleconferencing without compliance with the requirements of Government Code section 54953(b)(3), under specified conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, another condition is that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body determines that meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, on February 28, 2022, the California Department of Public Health rescinded the mask requirement effective March 1, 2022, for all individuals

regardless of vaccination status and instead issued a strong recommendation that all persons, regardless of vaccine status, continue indoor masking; and

WHEREAS, the Sacramento County Department of Public Health on its Epidemiology COVID-19 Dashboard continues to show elevated case and death data that appears to have been stable for weeks, and this is supported by ongoing wastewater sampling; and

WHEREAS, Sacramento County and surrounding counties currently have low community transmission rates for COVID-19 as defined by the Centers for Disease Control and Prevention; and

WHEREAS, on April 21, 2022, the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) re-adopted its workplace COVID-19 Emergency Temporary Standards (ETS), as modified, effective May 6, 2022, through December 31, 2022, including outbreak reporting; and

WHEREAS, SMUD staff and other community members are still reporting infections with lasting symptoms; and

WHEREAS, adoption of the new bivalent booster is still relatively low; and

WHEREAS, SMUD Board and Committee meetings can last as long as four hours, with participants sitting in the same room sharing air the entire time; and

WHEREAS, it would be impractical for SMUD to take steps necessary to prevent imminent risks to the health and safety of attendees, such as by holding public meetings outdoors, ensuring public meeting attendees are vaccinated, have appropriate face coverings, and wear them consistent with public health guidance; and

WHEREAS, all meetings, agendas, meeting dates, times, and manner in which the public may participate in the public meetings of the SMUD Board and offer public comment by telephone or internet-based service options including video conference are posted on the SMUD website and physically outside of SMUD's Headquarters Building; and

WHEREAS, by Resolution No. 21-10-01 adopted on October 12, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-10-03 adopted on October 21, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-11-05 adopted on November 18, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 21-12-04 adopted on December 9, 2021, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-03-01 adopted on March 8, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct

remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-03-03 adopted on March 17, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-04-01 adopted on April 13, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-04-03 adopted on April 21, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-05-06 adopted on May 19, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-06-02 adopted on June 16, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-07-02 adopted on July 21, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-08-05 adopted on August 18, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-09-06 adopted on September 15, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-10-01 adopted on October 12, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, by Resolution No. 22-10-03 adopted on October 20, 2022, this Board made findings that requisite conditions exist for the SMUD Board to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; **NOW, THEREFORE**,

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

Section 1. Risks to Health and Safety of Attendees. The Board has reconsidered the circumstances of the state of emergency and hereby finds that the

state of emergency continues to directly impact the ability of the members to meet safely in person and holding SMUD Board meetings in person would present imminent risks to the health and safety of attendees.

Section 2. Remote Teleconference Meetings. SMUD staff are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution, including conducting open and public meetings in accordance with section 54953(e) and other applicable provisions of the Brown Act.

Section 3. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) December 17, 2022, or (ii) such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the SMUD Board may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

SSS No.
GM 22-149

BOARD AGENDA ITEM STAFFING SUMMARY SHEET

Committee Meeting & Date
Policy – 11/16/22
Board Meeting Date
November 17, 2022

TO				TO			
1.	Antiwon Jacobs			6.	Claire Rogers		
2.	Jennifer Davidson			7.			
3.	Suresh Kotha			8.			
4.	Brandy Bolden			9.	Legal		
5.	Farres Everly			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) David Bitter		DEPARTMENT Cybersecurity		MAIL STOP K112		EXT. 6901	DATE SENT 10/26/2022
NARRATIVE:							
Requested Action: Accept the monitoring report for Strategic Direction SD-16, Information Management and Security .							
Summary: Present the 2021-2022 Board Monitoring Report for SD-16, Information Management and Security.							
Board Policy: Strategic Direction SD-16, Information Management and Security. (Number & Title)							
Benefits: Provides an update to the Board of Directors on the progress and status of the Information Security, Privacy and Records Management programs.							
Cost/Budgeted: Costs contained in internal labor budget.							
Alternatives: Receive information via memo or written report.							
Affected Parties: All SMUD Departments							
Coordination: Cybersecurity, Records Information Management, Legal, Facilities, Security Operations							
Presenter: Antiwon Jacobs, Director, Cybersecurity Kelsey McFadyen, Enterprise Records Program Manager Rob Lechner, Director, Facilities & Security Operations							

Additional Links:

SUBJECT

**Strategic Direction SD-16, Information Management and Security
Monitoring Report**

ITEM NO. (FOR LEGAL USE ONLY)

10

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: November 2, 2022

FROM: Claire Rogers *CR 11/2/22*

**SUBJECT: Audit Report No. 28007435
Board Monitoring Report; SD-16: Information Management and Security**

Audit and Quality Services (AQS) received the SD-16 *Information Management and Security* 2022 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.

CC:

Paul Lau

Board Monitoring Report 2022

SD-16 Information Management and Security



1) Background

Strategic Direction Information Management and Security policy states that:

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

- a) **Information Security:** SMUD will protect customer, employee and third-party information, and SMUD information systems are protected from unauthorized access, use, disclosure, disruption, modification, or destruction.
- b) **Physical Security:** SMUD will safeguard its employees while at work as well as customers and visitors at SMUD facilities. SMUD will also protect its facilities and functions that support the reliability of the electric system and overall operation of the organization from unauthorized access or disruption of business operations.
- c) **Customer Privacy:** SMUD will annually notify customers about the collection, use and dissemination of sensitive and confidential customer information. Except as provided by law or for a business purpose, SMUD will not disseminate sensitive and confidential customer information to a third party for non-SMUD business purposes unless the customer first consents to the release of the information. Where sensitive and confidential information is disseminated for a business purpose, SMUD will ensure: (i) the third party has robust information practices to protect the sensitive and confidential customer information, and (ii) use of the information by the third party is limited to SMUD's business purpose. SMUD will maintain a process that identifies the business purposes for which SMUD will collect, use and disseminate sensitive and confidential customer information.
- d) **Records and Information Management:** SMUD will maintain the efficient and systematic control of the creation, capture, identification, receipt, maintenance, use, disposition, and destruction of SMUD records, in accordance with legal requirements and Board policies.

2) Executive summary

- a) The Information Security, Physical Security, Privacy, and Records and Information Management programs and initiatives align directly to our 2030 goal of providing world

class safety & reliability. These programs work towards ensuring that SMUD continues to be a good steward over customer information, physical security, privacy, and records in accordance with our customers' high expectations.

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

c) Summary:

SD Requirement	Program/initiative/policy	Purpose	Outcome	Notes
Information Security: protect systems and information from unauthorized access	Information security program; AP 07.03.01 Information Security Concepts and Roles	Protect systems and information; provide policy supporting the Cybersecurity program	Security controls and processes are in place to protect people, processes and technology	
Customer Privacy: Annually notify customers about use of information	Annual notice of privacy practices	Notify customers of our privacy practices	Notice sent in the May bill package	Minor changes (how we protect data and change address to PO Box)
Customer Privacy: Ensure security where data is shared	System Security Plans and SOC 2 audit reports requirement	Evaluate the information practices and security controls of third parties	High confidence that vendors are using best practices to protect SMUD sensitive and confidential information	
Customer Privacy: Maintain a process that identifies purposes for information collection and dissemination	Data Sharing Policy, Data Sharing Request/Approval Process	Track NDAs, the data being shared, and the business justification for sharing	Data Sharing process is being observed and maintained	
Records & Information Management: Identify and manage records and information	Records Evaluations	Evaluate and classify records and ensure retrieval, disposal and protection.	On-track to meet 5-year plan of completing evaluations for entire enterprise	Content subject to evaluations to be migrated beginning in 2023
Records & Information Management: Ensure all information systems are	Information System Evaluations	Review of software tools housing SMUD data and information.	Evaluate software tools for RIM compliance	RIM being added to software purchase process

compliant with RIM requirements and best practices.				
Records & Information Management: Education	Ongoing Enterprise training and Records Custodian Forums	Provide training to all of SMUD, with focused efforts on the Records Custodians	Annual training provided to all employees, with supplemental support, as needed. Also quarterly focused support for Records Custodians	
Physical Security: safeguard employees, customers, and visitors	AP 06.03.01 Increase interoperability with local law enforcement agencies during critical incidents	Protect SMUD employees and those who visit SMUD facilities	Completing operational component of project to facilitate direct radio contact with local law enforcement agencies	SMUD Security Operations Supervisors and Dispatchers communicate in the field and via dispatch 24/7
Physical Security: protect SMUD facilities	AP 06.03.01 Physical Security Assessment(s) of SMUD physical properties and assets	Protect SMUD campuses and grid facilities through assessment and implementation of security-industry best practices	Security Operations personnel continue to provide security evaluations for SMUD real properties	Third-party Risk, Threat, and Vulnerability Analysis tentatively scheduled to begin Q1 2023

3) Additional supporting information

Information Security

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

The Chief Information Officer's (CIO) Cybersecurity group, under the direction of the Chief Information Security Officer, continues adoption of the National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF) to establish prudent and reasonable measures intended to protect SMUD's operations from a cyber-attack, disruption and other threats to enterprise technologies, processes and information. The CSF has five core functions (Identify, Protect, Detect, Respond, and Recover) which comprise both administrative and technical controls to effectively manage information and cybersecurity risk. Cybersecurity is actively working to implement the CSF measures to enhance information management and security risk management practices and processes in support of SD-16. Cybersecurity will highlight the cybersecurity capabilities provided in an update to the board for SD-16 during an upcoming closed session.

Physical Security

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

As a continuation of the project that successfully allows SMUD to utilize the Sacramento Regional Radio Communications system through an agreement with the Sacramento County Sheriff's Department, training was facilitated to SMUD Security Operations personnel to ensure our obligations were fulfilled. The modification of appropriate policy and procedure documents, as well as installation of the radios in our two Security Operations Centers, and to our personnel, will finalize the implementation of this effort. This last operational component will ensure that SMUD can communicate directly with local law enforcement during critical incidents so they can provide the most expeditious and effective support to our personnel.

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

Physical Security was able to work with a cross-departmental group of stakeholders to successfully down-select and procure a replacement Physical Access Control System, which is the first line of defense for protecting the Bulk Electrical System. This effort continues to progress and will result in a greater level of protection and awareness. Physical Security is concurrently working on a project to provide all SMUD campuses with a Risk, Threat, and Vulnerability Assessment (RTVA) conducted by a third party to examine the overall security posture and protection measures as they currently exist and make recommendations for mitigation of identified risks. This RTVA will prove to be an invaluable tool to allow for the identification and mitigation of security-centric issues.

Customer Privacy

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

SMUD sent out our annual privacy notice via email and as a bill insert to customers during the May bill cycle. The notice was updated this year to add a brief overview of how SMUD protects customer personal information and to change our address to our PO Box. The notice is otherwise very similar to previous years and continues to include plain language regarding SMUD's collection, use, and release of customer sensitive and confidential information, the business purposes for which customer information is used, as well as a reaffirmation of SMUD's commitment to customer privacy.

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

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

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

Cybersecurity and Procurement continue to follow a formalized supply chain risk management process, in compliance with NERC CIP requirements. The process is aligned to the NIST Cybersecurity Framework (CSF) and is reviewed on at least an annual basis to ensure it is functioning as designed and incorporates lessons learned as new procurements follow the process. The process includes a mandatory procurement requirement for vendors to allow the Cybersecurity team to evaluate the security posture of a proposed vendor solution. The American Institute of CPAs (AICPA) Service Organization Control 2 (SOC 2) Type 2 continues to be our procurement standard as it is an independent assessment focused on a solution's security controls which includes tests of the security controls' efficacy. SOC 2 Type 2 reports provide staff confidence that vendor security controls are robust and sufficient to protect SMUD information. Contract and non-disclosure agreement language is used to provide assurance that SMUD provided sensitive and confidential information will not be used for any unapproved purposes. Additionally, our data sharing policy and process (discussed below) align to this requirement.

SMUD will maintain a process that identifies the business purposes for which SMUD will collect, use and disseminate sensitive and confidential customer information.

MP 07.03.01.122 - Data Sharing requires an approved data sharing request prior to sharing information with a third party for SMUD business purposes. The policy and process were this year subjected to an audit by SMUD's Audit and Quality Services department. Although no high-risk observations were made, the audit discovered ways to improve both the data sharing policy and the associated process. Responses to the audit observations are on schedule to be completed by the end of October 2022.

Records and Information Management

The efficient and systematic control of the creation, capture, identification, receipt, maintenance, use, disposition, and destruction of SMUD records, in accordance with legal requirements and Board policies.

The Records and Information Management (RIM) Program is making continued progress toward our 5-year plan of completing record evaluations for all business areas; we are currently in year 4, and projecting completion by year 5. We have streamlined our evaluation processes to make

the identification of gaps, and implementation of compliant solutions, easier and faster. These changes provide us with a high level of confidence that SMUD records will be identified and managed appropriately once this effort is complete.

The RIM Program in collaboration with the Enterprise Content Management (ECM) team formulated a plan to launch a two-year mass content migration project beginning in 2023. Using completed RIM records evaluations, the effort will identify, organize and migrate content from non-approved records repositories into approved record repositories. This will allow this content to be managed in accordance with SD-16.

The RIM program is continuing to partner with IT to review and support new software integrations to ensure they meet records policies and information management requirements. This is imperative as new software often produces and stores records outside of official repositories. RIM is being added to the purchase approval process to support this effort.

The RIM Program continues to collaborate with the Microsoft 365 Governance Oversight team, Cybersecurity, the CIP Program, Data Governance, and other business partners to ensure compliance with records policies and information management requirements.

4) Challenges

Information Security

This year saw a significant change to the cybersecurity threat landscape in the form of heightened geopolitical tension and nation state cyber actors targeting critical infrastructure (including energy), leading to a “Shields Up” declaration from the Department of Homeland Security’s Cybersecurity and Infrastructure Security Agency (CISA). Cybersecurity requested the focus and assistance of numerous IT teams to follow this guidance to help manage the cyber risk. An associated awareness campaign has also been helpful in educating all staff of the risks we’re facing and the role they play in keeping our systems and data protected. In addition to the technical controls put in place, cybersecurity also partnered with other departments to ensure our continued cyber insurance coverage.

SMUD’s Payment Card Industry (PCI) card payment transaction volume increased slightly; however, we remain a Level 2 Merchant. SMUD is again compliant with the PCI Data Security Standard (PCI DSS) this year as determined by an independent third-party PCI Qualified Security Assessor. Our required assessment documents were submitted to Chase Paymentech in June. This year we also performed a gap assessment between our current posture and the upcoming PCI DSS v4, where we found that our mature cybersecurity practices have us well prepared for the updated standard’s requirements. Although a small technology investment may be needed, the team is confident that SMUD will be compliant well before the new standard takes effect in March of 2024.

The Cybersecurity team continues to ensure compliance with updated Critical Infrastructure Protection (CIP) standards as well. In Q3 of 2022, for the second audit cycle in a row, our

compliance program experienced an audit by WECC with no findings. Speaking to the strength of our compliance program, SMUD received five positive observations.

In addition to the compliance related work that results from the breaches in the news, SMUD Cybersecurity has also continued to mature our Cybersecurity Emergency Operations Program (CEOP). Under the CEOP program the team conducted an incident response exercise for our CIP sub-plan. The exercise met all test objectives and validated capabilities in place to respond to a cyber incident. Plans are in place for an additional tabletop exercise in November 2022.

Physical Security

Physical Security is the first line of defense to safeguard SMUD's employees and visitors, as well as SMUD's assets, facilities, and infrastructure. Due to our 'open campus' construct, Physical Security will continue to experience challenges in preventing unauthorized persons from entering SMUD property and buildings. Physical Security continues working to limit unauthorized physical access to SMUD. SMUD assets throughout the region are also subject to challenges in preventing persons from damaging or accessing them, and work continues to try to deter and prevent those occurrences.

Security's role of 'First Responder' to cyber incidents is reinforced through training, mentorship on the job by senior officers, and a thorough understanding of the processes and procedures that provide understanding of SMUD's needs during a possible cyber incident. Security Operations has worked with several other stakeholder business units to begin the implementation of the replacement of the system that is used to monitor, detect, and report physical security events and alarms throughout the SMUD enterprise. This will allow better compliance and provide for greater levels of awareness. The system that is used by Security Operations to record calls for service, document their outcome, and provide for constant awareness of the status of ongoing events is also in the process of being replaced to better allow SMUD to capture metrics to increase operational efficiency and decrease unnecessary activities. Physical Security also worked over the past year with several other stakeholders to revise and refine all the security-related policies and procedures. In addition, new standard operating procedures were created that provide Security Operations personnel with clear and concise direction for situations requiring a response to issues associated with our physical security compliance program.

Customer Privacy

SMUD continues to see requests for SMUD customer data to be used and shared for additional purposes and programs, including customer personally identifiable information (PII). Requests for such data have come from internal programs, state agencies and vendors. SMUD's Data Sharing Policy and process are in place to provide request tracking and approval to ensure that all sharing of PII is authorized and performed using a secure transfer mechanism.

RIM

The RIM program continues to mature and integrate information management best practices into SMUD's daily operations. Business areas are actively collaborating with RIM in the creation

of recordkeeping policies and procedures specific to their day-to-day operational needs. SMUD's continued development of the RIM program further reduces the risk of potential multi-million-dollar fines and reputational damage associated with lack of records management controls.

Recently RIM launched an initiative to turn on minor (draft) versions in SharePoint Online information repositories. Most organizations use minor versions when files are under development, and only create major versions when certain milestones are reached in document creation or when the document is ready access or review by a wide audience. Many organizations also use minor versions as a means of securing draft documents to ensure only necessary individuals' access to the document. That means that minor versions cannot be seen by anyone else until a major version is published. This initiative will align SMUD with information management best practices that many of our organizational peers are already doing. This will reduce the risk of SMUD documents being exposed to an audience before they are finalized, and possibility of that audience taking non-approved action.

5) Recommendation

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

6) **Appendices**

Definitions and acronyms:

NIST – National Institute of Standards and Technology

CSF – Cybersecurity Framework

RTVA – Risk, Threat, and Vulnerability Assessment

LLEA – Local Law Enforcement Agency

SRRCS – Sacramento Regional Radio Communications System

CISA – Cybersecurity and Infrastructure Security Agency

PCI – Payment Card Industry

PCI DSS – Payment Card Industry Data Security Standard

CEOP – Cybersecurity Emergency Operations Program

CIRP – Cybersecurity Incident Response Plan

RESOLUTION NO. _____

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

This Board accepts the monitoring report for **Strategic Direction SD-16,**
Information Management and Security, substantially in the form set forth in
Attachment ____ hereto and made a part hereof.

SSS No.

CFO 22-013

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Policy – 11/16/22Board Meeting Date
November 17, 2022

TO						TO										
1.	Russell Mills					6.	Suresh Kotha									
2.	Claire Rogers					7.										
3.	Jennifer Davidson					8.										
4.	Brandy Bolden					9.	Legal									
5.	Farres Everly					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)					DEPARTMENT						MAIL STOP		EXT.		DATE SENT	
Toni Hoang					Treasury & Risk Management						B355		6532		10/26/2022	

NARRATIVE:

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

Summary: The Enterprise Risk Management Report summarizes the activities that have occurred since the December 2021 annual report. The report includes historical risk profiles of enterprise risks which are not currently within management's risk objectives, the 2023 mitigation strategies, and a current residual risk exposure status of all identified enterprise risks.

Effectively balancing and managing risk to further SMUD's policy and business goals is a core value of SMUD. SMUD will implement and maintain an integrated enterprise risk management process that identifies, assesses, prudently manages, and mitigates a variety of risks facing SMUD, including financial, supply, operational, physical and cyber security, climate change, legal, legislative and regulatory, and reputational risk.

Board Policy: Strategic Direction SD-17, Enterprise Risk Management.
(Number & Title)

Benefits: Provides Board members information regarding SMUD's Enterprise Risk.

Cost/Budgeted: Costs contained in internal labor budget.

Alternatives: Provide a written report to the Board.

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

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

Presenter: Russell Mills, Director of Risk Management & Treasurer

Additional Links:

SUBJECT

SD-17, Enterprise Risk Management Board Monitoring Report

ITEM NO. (FOR LEGAL USE ONLY)

11

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: November 2, 2022

FROM: Claire Rogers *CR 11/2/22*

**SUBJECT: Audit Report No. 28007436
Board Monitoring Report; SD-17: Enterprise Risk Management**

Audit and Quality Services (AQS) received the SD-17 *Enterprise Risk Management* 2022 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.

CC:

Paul Lau

Board Monitoring Report 2022

SD-17 Enterprise Risk Management



1. Background

Strategic Direction 17 states that:

Effectively balancing and managing risk to further SMUD's policies and business goals is a core value of SMUD.

Therefore:

SMUD will implement and maintain an integrated enterprise risk management process that identifies, assesses, prudently manages, and mitigates a variety of risks facing SMUD, including financial, supply, operational, physical, and cyber security, climate change, legal, legislative, and regulatory, and reputational risk.

2. Executive summary

- a) SMUD strategically manages risk to proactively reduce the chance of loss, identify and take advantage of opportunities to create greater financial stability and protect our resources to support SMUD's mission and create value for our customers.
- b) **SMUD is in compliance with the Board's Strategic Direction 17 (SD-17) Enterprise Risk Management.**
- c) SMUD continues to maintain an integrated Enterprise Risk Management (ERM) Program.

SMUD's ERM program continues to integrate risk management best practices to support decision making in key business processes. This year we have expanded the reliance on the risk framework for prioritization, planning, and budgeting.

Since the 2021 Annual Monitoring Report, staff continues to review SMUD's portfolio of risks. The Year-on-Year Residual Risk Exposure results are summarized as follows:

			Dec. 2020	Nov. 2021	Nov. 2022
✓	"Red":	Extremely High Residual Exposure	(0)	(0)	(0)
✓	"Orange":	High Residual Exposure	(4)	(5)	(5)
✓	"Yellow":	Medium Residual Exposure	(36)	(40)	(40)
✓	"Green":	Low Residual Exposure	(38)	(38)	(38)
✓	"Blue":	Extremely Low Residual Exposure	(0)	(0)	(0)
			(78)	(83)	(83)

Since the 2021 Board Monitoring Report, the Enterprise Risk Management Program has made changes to the risk scoring rubric by adding a new impact category, environmental impact, to the existing 6 impact categories (financial, legislative/regulatory/compliance, operational, strategic, reputational, and workforce). Adding environmental impact as a

scoring category allows SMUD to monitor potentially adverse outcomes or events due to pressures or changes in environmental conditions resulting from SMUD activities. Staff continues to implement risk mitigation strategies to balance residual risk exposures. Some risks, while medium or “yellow” are within the risk management goal. There are currently 45 risks, shown in the last two lines of the table, which are within the risk management goal.

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

Current Residual Risk Exposure	Risk Management Goal	Number of Risks
Orange “high”	Yellow “medium”	5
Yellow “medium”	Green “low”	33
Yellow “medium”	Yellow “medium”	7
Green “low”	Green “low”	38

SMUD’s enterprise-wide risk exposure is a medium/high. The ongoing challenges of the pandemic continue to unfold, with it, comes a bigger landscape of ever-changing risks that must be managed. SMUD’s ambitious 2030 Zero Carbon goal, the rapid pace of disruptive innovation and technology developments in an advancing digital world, availability of skilled workforce, global supply chain pressure and inflationary conditions related to economic and geo-political instability, increasing legislative/regulatory requirements, the need for resiliency, and ability to pivot when the unexpected occurs is at an all-time high. Managing these risks well are key to SMUD’s performance in the upcoming years. Staff continues identify risks and implement initiatives to mitigate and manage the risks appropriately.

3. Additional Supporting information:

a) Summary of 2022 activities

In 2022, ERM continued to support the organization with facilitating risk conversations and providing a risk framework for uniformed risk assessments across the organization. The overarching goal is to encourage the integration of risk-based thinking into decision-making at all levels, effectively balancing risks with opportunities.

ERM continues to utilize four existing committees to enhance cross-functional discussion and thorough understanding of major risk issues at the executive and operational leadership team level. One of these is an executive level oversight committee, the Enterprise Risk Oversight Committee (EROC) which includes multiple executives. The other three are the Trading Operations Risk Committee (TORC), Zero Carbon Plan Implementation Team, and the Three Lines Working Team.

2022 continues to bring changes and challenges. Despite the many challenges, staff continues to leverage the enterprise risk management framework to support enterprise-wide risk management/mitigation activities integrated within our enterprise strategy and prioritization processes, bringing positive outcomes for SMUD, our customers, and the community. Some samples of these activities include:

North American Electric Reliability Corporation (NERC) Compliance Audit

The Western Electricity Coordinating Council (WECC) conducted a required comprehensive triennial audit of SMUD’s compliance with NERC reliability and security standards. The audit scope included NERC’s Critical Infrastructure Protection (CIP) and Operations and Planning (O&P) standards that apply to Bulk Electric System (BES) operations.

Representatives of the Federal Energy Regulatory Commission (FERC) and NERC participated as audit observers. The WECC audit included both a review of SMUD's historical compliance performance over the last three years (2019 to 2022) as well as reviewing how SMUD manages forward-looking reliability risks in areas governed by these standards.

WECC determined SMUD was compliant with all of the NERC standards reviewed based on a thorough inspection of evidence, interviews with subject matter experts, and inspections of SMUD facilities. Significantly, WECC noted five specific positive examples of SMUD performing exemplary practices that support reliability objectives and reduce future reliability risks. The many positive outcomes from the audit include WECC's increased confidence in SMUD's ability to identify and mitigate risks to the reliability and security of the BES. These outcomes reinforce the success of SMUD implementing risk-based approaches to achieve reliability and regulatory compliance objectives.

Tabletop Exercises

Staff continues to conduct emergency exercises and coordinate emergency response to actual events at SMUD by coordinating cross-functionally with leaders and team members from across SMUD. Since the last SD-17 report, staff has conducted emergency exercises and coordinated responses to more than a dozen events. Some notable exercises include the annual wildfire mitigation tabletop exercise and gas pipeline operations response exercise. These exercises are conducted with both internal and external participants with the goal to test SMUD's response and communications plans, both internally and externally. The outcome of these exercises is that SMUD has well documented and coordinated response when it comes to wildfire events and gas pipeline operations.

Supply Chain Risk Management

Staff has implemented a formal Supply Chain Risk Management (SCRM) process. The process is a robust approach to supply chain risk management including detailed annual enterprise risk management assessment addressing: demand planning, supplier base, internal logistics, market dynamics, supplier performance/relationships, natural disasters, government regulation, attracting/retaining/training skilled employees, and technology applications (these criteria were based on best practice from ISO 31000 standards). SCRM was expanded to include a risk register with quarterly assessments in detailed categories of construction, materials/equipment, and services/technology to measure and better predict the changing levels of risk of certain material from quarter to quarter. In 2022 staff implemented a cross functional team that included SMUD executive leaders to manage the industry-wide shortage of distribution transformers and mitigate impact to SMUD customers. SCRM allows staff to anticipate operational needs earlier, therefore, reduce wait time; SMUD was not as impacted as other organizations by worldwide supply chain impacts we were able to identify and get materials when others aren't able allowing SMUD to better serve new customers and keep up with maintenance requirements and outage response as a result.

Protection Against Rising Interest Rates

Staff continually monitors the effects from a rising interest rate environment. These efforts provide opportunities to proactively mitigate exposure to higher capital funding costs and provide for opportunities to lower debt service costs through refunding outstanding bonds. In 2019 and 2020, staff entered a series of three interest rate hedges (swaps) to lock in refunding rates for 2021, 2022 and 2023, that provide savings to SMUD and protect against rising interest rates that could eliminate the opportunity to refund bonds for those savings.

In 2022, the proactive risk mitigation proved to be timely and necessary, after the Federal Reserve Bank (FED) began raising its rates to reign in inflationary pressures. Even with rates rising swiftly from historical lows, SMUD's 2022 bond refunding transaction was successful due to the interest rate hedge and will provide for \$31 million of cash flow savings over the next decade. Staff expects additional benefits from another interest rate hedge for a 2023 refunding next year. Staff will continue to look for opportunities to mitigate risk to SMUD from rising interest rates and provide for the lowest cost of capital funding possible.

Enterprise Prioritization

Staff continues to leverage the enterprise risk management framework to optimize resource allocation and help build grid resiliency and future capacity for SMUD's zero carbon goal. In 2022, staff launched a new executive prioritization process to help align our 2023 resource plan to areas of high risk and strategic value. New work proposals were evaluated in part to identify the associated enterprise risk and to determine the risk management benefits of adding these items to our enterprise work plan. Staff continues to refine and further expand upon the first-year implementation of the new prioritization process.

2030 Zero Carbon Plan

Climate change is a pressing issue facing our region and the world. On April 28, 2021, SMUD's Board solidified SMUD's commitment to leading the way to a clean energy future with the approval of our 2030 Zero Carbon Plan (Plan). The Plan is a flexible pathway to eliminate carbon emissions from our power supply by 2030, the most ambitious goal of any large utility in the country. The Plan demonstrates our commitment to finding innovative ways to reach our zero-carbon goal without impacting reliability, or rates, which are among the lowest in California. To pay for new technologies and make them available to customers in an equitable manner, we'll aggressively pursue partnerships, investors, and grant funding, while keeping our rate increases at or below inflation. In 2022, staff continues to conduct and review reliability studies to ensure that reliability levels are maintained, develop utility scale proven clean technology projects, launch customer pilot programs, research the viability of new technologies to pilot, and look for ways to limit rate increases through cost offsets from operational efficiencies and grants/partnerships.

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

- In 2022, 12 audit reports were reviewed by the ERM Office, and none resulted in a change to the risk profile.

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

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

- b) **Benchmarking:** Staff reviews available enterprise risk related information and incorporates new risk issues and/or expands existing risk issues where appropriate. North Carolina State University's (NCSU) Enterprise Risk Management Initiative and Protiviti continue to jointly publish benchmark information. The joint study, 2022 & 2031 Executive Perspectives on Top Risks, provides insight for short-term and long-term risks from 1,453 global board members and executives from across several industries. The study found that for 2022, the scope of global top risks was more expansive than previous years. People and culture are top of mind for many leaders as it becomes increasingly challenging to attract and retain talent to address needs across organizations. Economic uncertainties as well as massive disruptions in the global supply chain and innovative disruptions continue to impact strategic initiatives for many organizations. Overall, the top ten identified enterprise risk issues across the surveyed organizations and those specific to the Energy and Utility Industry (Utility Industry) and its trend analysis is consistent with SMUD's identified enterprise risks.

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

- c) **Looking forward**

In 2023, ERM's goal is to build a more risk aware culture through the development and implementation of a Risk Champion Network and frequent risk communications and learning modules. Staff will continue to implement programmatic changes and fine tune risk management practices within business processes. The following initiatives have been planned:
















- Develop risk awareness trainings
- Continue to fine-tune risks in enterprise prioritization and strategy process
- Update SMUD's 5-year Local Hazard Mitigation Plan
- Continue to support SMUD's wildfire safety program
- Positively influence state and federal legislative/regulatory issues
- Attract and retain a skilled and innovative workforce
- Provide programs and services which reflect the customer's changing expectations
- Support SMUD's Environmental and Safety initiatives
- Enhance data categorization and availability to support business and customer decisions
- Continue cyber security and privacy awareness and compliance activities
- Improve upon current physical security and public safety practices
- Increase alignment between costs and revenue collection in SMUD's rate design

- 4. Challenges:** The recovery after Covid-19 along with inflation have disrupted the job market and continues to put strain on business operations and critical resources. Workforce evolution is creating uncertainty around how to operate and sustain culture while also pursuing ambitious goals. There continues to be a growing focus on climate change policies, regulations, as well as Environmental, Social, and Governance (ESG). The risk environment continues to challenge staff to be vigilant at making measured risk informed decisions to achieve business objectives. SMUD's ERM framework allows staff to better manage risks as a portfolio, rather than in silos. The result is increased awareness of SMUD's risks, level-setting of risk tolerance across the enterprise, efficiencies in mitigation efforts as well as potential cost savings.

- 5. Recommendation:** It is recommended that the Board accept the Monitoring Report for SD-17 Enterprise Risk Management.











Enterprise Risk Mitigations for Risks Currently not within Target

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Financial	Project execution						The Project Portfolio Management tool was used for capturing all new project requests for one time work for the 2023 budget. This streamlined the level of effort for executive decision making and discussion, and the inputs were streamlined to work for the new prioritization process, and the data was pulled into the prioritization dashboards. Work is continuing on building reports for the tool and incorporating the data so that it can be used with PowerBI for other reporting. With the centralization of PMO's (IT & Non-IT) and the soon to be created 2030 Zero Carbon Plan PMO, staff continues to work with the Project Management Office's to create standards and expectations and clarification of roles as we move forward, especially based on the changes created by the prioritization process, and monthly prioritization meetings.
Operational: People	Strategic workforce agility						The work completed on both Succession Planning and Strategic Workforce Planning in 2022 was foundational for 2023. In Succession Planning, the focus will be on supporting leaders' development plans to ensure wherever possible that we have the internal talent for senior leader roles. In Strategic Workforce Planning, the focus will be on the actions plans to close talent gaps on key roles. Depending on the role, actions plans may include strategies like training and development, workforce outreach, or other efforts to programs to ensure SMUD has the talent it needs. With both programs, we employ a Diversity Equity Inclusion and Belonging (DEIB) lens to ensure these programs and strategies are consistent with SMUD's overall DEIB strategy.
	Diversity, equity, inclusion, and belonging (DEIB)						In 2023, DEIB team will continue to focus and prioritize the connection of DEIB to our ZCP

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Risk Category	Risk	Risk Trend	Target				2023 Risk Mitigation
		2020	2021	2022	Trend	Target	
	Employee Safety						SMUD operations continue to develop numerous business unit specific safety work instruction documents to provide details of job hazards and work steps to prevent an incident. In addition, the SMUD CAL OSHA Injury Illness Prevention Program (IIPP) has been updated and is being followed. Key areas of risk mitigation measures that SMUD performs include safety responsibility awareness, OSHA regulatory compliance, safety communications, hazard assessments, accident/exposure investigations, hazard correction, safety training and instruction, and recordkeeping. In addition, SMUD continues to maintain an effective contractor safety oversight program and SCORCH behavior-based safety. SMUD operations is also making significant upgrades and improvements to the safety software systems that are used throughout the company.
Operational: Systems and IT	Cyber security						"Since 2019, SMUD's IT Cybersecurity Department has strategically planned and implemented foundational measures to manage cyber risk to business operations from a cyber-attack, disruption, and from other threats to its people, processes, and technology. Accordingly, the Director of Cybersecurity established a cybersecurity program plan aligned to the National Institutes of Standards and Technology (NIST) Cybersecurity Framework. Organized the department by two core functions Cybersecurity Operations & Cybersecurity Governance, Risk, and Compliance (GRC). Introduced the following program capabilities under these two departments to effectively manage cyber risk: Governance (Policy and Control Frameworks), Risk Assessment and Management, Compliance, Awareness & Training, Audit & Assessment, Privacy, Incident Management & Response, and Operational Technology (OT) and Information Technology (IT) Engineering & Asset Security. Matured the Integrated Security Operations Center and NERC CIP Program Compliance & Standards Enforcement, which in 2022 SMUD's WECC CIP audit results yielded 100 percent compliant for the second time in a row. The cybersecurity program has continued to mature year-after-year and staff to appropriately manage SMUD's

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cyber, privacy, and compliance risk. In 2022, Cybersecurity has been focused on maturing and automating the department's cyber risk reduction capabilities, processes, and technologies:

- ServiceNow Platform Integration Maturity (Security Operations - SecOps Module & Integrated Risk Management -IRM):

- 2022 the Cyber & IT department is now successfully leveraging the ServiceNow Vulnerability Response Module (Goal: Visibility – Establish and Improve response and patch metrics / Information protection processes and procedures / Security continuous monitoring)

- 2022 the Cyber department is successfully leveraging ServiceNow for Cyber Vendor Risk Management (2023 Goal: Dashboard, Asset Management, Governance - IT & Business Environment, Risk Assessments, and Compliance. Dependencies on IT Departments Asset Management efforts and enrichment efforts for Configuration Management Database - CMDB)

- Cybersecurity Policy - Publish New Cybersecurity Policies (Goal: Aligned to the NIST 800-53 Families / Governance / enforcement). Supports Cybersecurity's governance structure and formalizes organizational-wide risk-based approach to drive accountability to the program.


























- 2022 Policies (19 Management Procedures – MP) have been drafted and are in the SMUD's policy review process for publishing and are expected to be published by end of year). 22 Supporting Standards will be reviewed by the Chief Information Officer (CIO) and published by end of year.

- 2022 Operational Technology (OT) Security (Goal: IT & OT Convergence) - Continued to move current OT Technology visibility Initiatives forward and process improvement.

- 2022 continued to adopt Zero Trust Model and Principles to reduce cyber risk of attack and impacts across business operations. (Goal - Embrace and gain Information Technology's commitment to further

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						adopt its system design principles to eliminate implicit trust and require continuous verification to determine access). Example of a Zero Trust principle is IT's implementation of Multi-factor Authentication (MFA) Strategic Goal added to IT Strategic Plan for adoption - Continuous evolution."
	Privacy					 SMUD continues to see demand for SMUD customer data to be used and shared for additional purposes and programs, including customer personally identifiable information (PII). Requests for such data have come from internal programs, state agencies and vendors. SMUD's Data Sharing Policy and Process are in place to provide request tracking and approval to ensure that all sharing of PII is authorized and performed using a secure transfer mechanism.
	Enterprise-wide documentation					 Records and Information Management will work with IT and the Business Units to address and implement solutions for the findings identified in completed records evaluations. The group will also continue to perform records evaluations across the remainder of business units, as well as continue refining and simplifying the evaluation process itself.
	Technology systems infrastructure					 Mechanical System (Chilled Water Loop) - Lack of redundancy remains a single point of failure.
Operational: Process	Gas & gas pipeline assets					 SMUD Gas Pipeline Operations (GPO) and Power Generations Engineering staff conduct annual programs that are designed to provide overlapping risk mitigation measures. The overall program for risk mitigation is the SMUD Gas Pipeline Integrity Management Program. Additionally, SMUD has a Public Awareness Program which targets segments of the public that are identified as having the potential to affect the SMUD gas pipeline such as Agricultural Operators, Excavation companies, engineering firms, and various public entities and utilities.
	Enterprise continuity management					 In 2022, staff will work to implement Enterprise Continuity Management Software (ECMS) solution to support efficient access


























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Risk Category	Risk	Risk Trend	Target		2023 Risk Mitigation		
		2020	2021	2022	Trend	Target	
							to real-time business continuity plan information and requirements during events that pose a threat to SMUD's continuity.
	Internal communications and alignment						The emphasis this year on senior leaders holding live sessions with their employees is designed to help mitigate the risk of misalignment and to engage in trust building through transparency and strong communications. This activity must be ongoing and sustained, particularly in times of rapid change, in order to mitigate this risk.
	Energy management center (EMC)						Facilities has continued to implement key projects that reduce the risk to electrical infrastructure.
	Physical asset security						Low-Impact Security requirements have been implemented and Security Operations continues to monitor sites and works to align the security plan to the One SMUD vision. The conversion to digital security cameras at substations is currently scheduled to be completed in Q4 2023. SMUD has updated its Physical Security policies and procedures in preparation for the 2022 Western Electricity Coordinating Council (WECC) audit, which was successful. Staff is developing a risk-based assessment program to demonstrate active and ongoing protection of defined assets to ensure that adequate protection measures are implemented.
	Transmission and distribution substation assets						The 2023 Capital Portfolio includes continuation and/or initiation of multi-year projects to replace circuit breakers, transformers, and switchgear.
	Secondary Networks						SMUD's Network Team has implemented key projects that reduce the risk to Network outages downtown. These projects include taking oil samples for all the 400 transformers in the downtown Network to assess the health of the transformers. SMUD's Network Team is also partnering with Supply Chain to begin pre-ordering long lead time transformers and network protectors ahead of a significant maintenance effort to replace transformers and network protectors in 2024 that are showing signs of end of life.











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Risk Category	Risk	Risk Trend	Target	2023 Risk Mitigation			
		2020	2021	2022	Trend	Target	
	Operational excellence						Ongoing execution of Operational Excellence Initiatives that focus on cost reduction, cost avoidance, increased revenue, and/or increased efficiency & productivity. Additional focus on building organizational competencies in continuous improvement will ramp up in 2023.
	Pricing and rate design implementation						The successor Net Energy Metering (NEM) rate or Solar and Storage Rate (SSR), along with other key rate implementation items went live by the deadline. No associated risk on implementation at this point.
	Labor: Business Disruption						In 2022, SMUD successfully reached agreement for successor 4-year labor contracts with the International Brotherhood of Electrical Workers (IBEW) Local 1245 and the Organization of SMUD Employees (OSE); both Memorandums of Understanding (MOUs) will be in place through December 31, 2025. Additionally, SMUD is currently in negotiations with the Public Safety Officers' Association (PSOA) for a successor MOU due to the current contract set to expire on December 31, 2022.
	NERC/FERC Standards						Staff continues to ensure compliance with the Federal Energy Regulatory Commission (FERC) mandated North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) Reliability Standards through internal coordination. SMEs review upcoming and approved Reliability Standards and update associated procedures, processes, and tools to ensure compliance. In addition, staff continues to execute the Internal Controls Evaluation (ICE) Program for both Operating & Planning and CIP Reliability Standards.
	Meter to cash						The current 2023 project proposals include significant system work including, Itron IEE upgrade, continued deployment of 2023 rate work, and ongoing ZCP program deliverables. IT, CCS, Strategy, and 2030 Zero Carbon leadership and staff have partnered to build robust planning, implementation, and QA/QC teams to ensure











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Risk Category	Risk	Risk Trend	Target	2023 Risk Mitigation			
		2020	2021	2022	Trend	Target	
							successful deployments of all changes. While the “Yellow” risk rating accurately reflects the level of change and effort to manage the change, advanced testing gives staff the opportunity to identify areas of concern before the customer experience is impacted. Should an error be identified after a customer’s bill has been impacted, SMUD Rate, Rules, and Regulations provide the latitude to rebill as needed to resolve the concern.
	Supply chain						Supply chain risk management (SCRM) efforts have become more sophisticated in 2022 including an internal coordination that has been escalated to include the Chief Operating Officer (COO) and Chief Financial Officer (CFO) to drive progress in demand planning, risk (of supply disruption) mitigation, and supplier performance management. Key accomplishments in 2022 include completing annual risk assessments for all SCRM categories (materials/equipment, services/technology, and construction), creating, and maintaining quarterly risk register documents, a cadence for internal SCRM meetings and senior leadership engagement. In 2023 these efforts will continue, the focus will be to stabilize the reporting, data, and cadence of meetings/process to keep the regular focus and continue to mitigate supply chain risks across all categories. New in 2023, a goal to establish more senior leadership involvement in managing critical third-party relationships - those top 10 to 20 suppliers that are 60 to 80% of SMUD’s spend and provide mission critical material, equipment, services, and technology - for example, meters, transformers, cable, wood/steel poles, veg management, underground and overhead line construction, substation construction, benefits, ERP, and other areas.
	59 th Street reuse						Risk reduction efforts underway include the following: 1) Lobbying efforts with the state, local agencies, and development organizations to support an agency developed attenuation factor that balances science and health risk to support risk-based cleanup level; 2) Development of a due diligence agreement with SKK/BlackPine to support off-ramps and land reuse options should SMUD be unable






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Risk Category	Risk	Risk Trend	Target		2023 Risk Mitigation	
		2020	2021	2022	Trend	Target
						to remediate PCE in soil to residential cleanup standards; 3) Purchase of an insurance document to reduce liability and risk from future offsite and onsite health exposure/liability claims; 4) Ongoing research and investigation to delineate the solvent plume and evaluate remedial action technologies for use at the site; and 5) Planned soil removal of the "hot spot" area and continued soil vapor extraction at 59th Street.
	New Services & Local Agency Projects					 Inadequate levels of resources may compromise our ability to maintain existing levels of service reliability, increase new load and hinder objectives within the 2030 plan. A work group was established to identify and mitigate challenges, find solutions, and establish a transformer issuance criterion. The team provides recommendations priorities ensuring that we maintain appropriate safety to regular stock of inventory. Some examples of solutions include reallocation of underutilized transformers, right-sizing of projects, and electrical alternatives.
	Innovation					 In partnership with EPRI's Global Innovation Effectiveness Network SMUD will conduct an Innovation Effectiveness Framework and Maturity Assessment to assist utilities in evaluating the effectiveness of their innovation activities and capabilities in order to pursue targeted improvements. EPRI's Innovation Effectiveness Assessment covers several areas of innovation management, including strategy, organization, culture, operating models, metrics, governance, and more. The framework used in the assessment is informed by leading utilities as well as academic literature and industry experience outside the electric utility sector to help ensure applicability to a broad set of innovation strategies and approaches. This project seeks to leverage benefits from the assessment application to organize a collaborative network of utility staff who are pursuing common methods to improve the performance and outcomes of their innovation initiatives. The project objectives are:
















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Risk Category	Risk	Risk Trend	Target	2023 Risk Mitigation			
		2020	2021	2022	Trend	Target	
							<ul style="list-style-type: none"> Assess the current state of the participant utility's innovation activities using EPRI's Innovation Effectiveness Assessment in order to create a baseline to help clarify gaps and areas for further growth. Evaluate future innovation growth and improvement options for the participant company using current state inputs and an industry knowledge base of results. Collect and exchange best practices across multiple participant utilities and companies to inform strategies for improvement. Summarize aggregate findings across multiple assessments to provide industry insights on innovation capabilities. Explore specific aspects of the practice of innovation in-depth (i.e., metrics, incentives, structures, etc.) to provide an applicable "toolkit" to utility innovation professionals. <p>Utilities participating in the Global Innovation Effectiveness Network have access to EPRI's assessment findings for their own organization as well as aggregate benchmarking data from other utilities who have completed the assessment. Additionally, the network is created as a means to collaborate with other participating utilities on innovation topics of interest.</p>
Strategic	Changing customer expectations						<p>In 2022, the restart of collections has gone relatively smoothly considering the significant number of accounts in arrears. Our successful application for California Arrearage Payment Program (CAPP) funds brought in \$41M that were applied to customers' accounts. Although value for what you pay is down for 2022 compared to 2021, the drop has not been as significant as originally expected. The Customer Strategy team continues to work closely with teams across SMUD to identify the ideal customer experience as we launch new products and services to our customers, as well as improve our current processes that impact the customer. Due to challenges with resource availability and responsiveness with our partner, SEW, we have not been successful in implementing the commercial portal as anticipated. The project is currently in a holding pattern while SMUD awaits SOC2 (security) certification.</p>

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						Further delays of this project and a continued reliance on SEW could create significant risks for the "customer platform" project planned for 2022. Operational teams across SMUD continue to provide solid customer service with SMUD's customer satisfaction scores remaining at or above targets.
	Competitive workforce total rewards					 We continue to leverage the 2022 activities in the strategy with Procurement and Benefits Team to build the healthcare cost containment roadmap using the GOST framework. Six Strategies with associated tactics were identified. Several of the strategies have been implemented and proven successful in recent renewal including building stronger relationships with carriers and more heavily leveraging AON along with assertive negotiations. The roadmap and associated actions were used to result in very favorable medical premium renewal. Premiums generally increase by 8%. After negotiations, United HealthCare presented SMUD with a renewal increase for the 2023 plan year of 4.9% for our active employee, pre-65 retiree and Medicare Advantage medical plans. Based on these rates and current enrollment, the total cost for 2023 medical benefit plans is projected at \$37.4 million. Kaiser Permanente presented SMUD with renewal increases for the 2023 plan year of -5.1% for our active employee, pre-65 retiree and Medicare Advantage medical plans.
	Renewable portfolio standards (RPS)					 SMUD achieved the 2020 RPS requirements for Compliance Period 3 2017-2020, achieving a 33% RPS in 2020. SMUD also filed its annual RPS compliance filing to be completed by end of year. The next compliance period is being planned for Compliance Period 4, 2021-2024, the next RPS target statute is a 44% RPS in 2024. Project delays and increased demand require careful planning and procurement of RPS eligible renewables to meet CP4 requirements. Market Strategy team has developed the RPS Strategy to provide a plan to compliance.
	Enterprise grant integration,					 Current projected resources needed to support the grant strategy and associated control measures and processes necessary have not





















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Risk Category	Risk	Risk Trend	Target				2023 Risk Mitigation
		2020	2021	2022	Trend	Target	
	execution and alignment						been fully identified or approved for 2023. Further alignment and organizational changes are anticipated to take place in early 2023 for this purpose.
	2030 Zero Carbon Plan						In 2023, staff continues to conduct and review reliability studies to ensure that reliability levels are maintained, develop utility scale proven clean technology projects, launch customer pilot programs, research the viability of new technologies to pilot, and look for ways to limit rate increases through cost offsets from operational efficiencies and grants/partnerships.
	Economy: business agility						In the 2022 Rate process, staff introduced a 2% rate increase for 2023. The CEO and CFO have shown fiscal prudence and have kept the budget within financial limits, which is an improvement. SMUD's hiring process has been streamlined in order to have clarity around what hiring needs Executive review. Staff incorporated the new prioritization framework into the planning process and were able to finalize the 2023 budget within revised financial limits. As we get further insight into the programs and items included in the 2030 Zero Carbon Plan, we are getting a better insight into the cost and financial concerns. Our models continue to be synced up and that work will continue. We're starting to see the benefits of Operational Excellence in our forecasts and 2023 plan. Given the financial implications of the prolonged CPP outage & heat storm in September 2022, financial knowledge & transparency will need to have increased focus in 2022 and beyond as a mechanism to help SMUD adjust to changes in financial status. Additionally, the monthly prioritization meetings will help re-allocate budget funds in 2023. Increased focus on forecasts from the CEO will help drive better financial forecasts & visibility.
	CEC: Integrated resource planning (IRP)						SMUD's IRP filing was completed in 2022 pending CEC review for consistency with IRP reporting guidelines. Assuming compliance is met, SMUD will not have to file another IRP with the CEC for another 5 years.

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External	Post 2020 carbon markets						SMUD continues to be engaged in the stakeholder process with the California Air Resources Board (CARB) as they look to reallocate carbon allowances based on the new 60% RPS (SB100). Staff has been providing analysis and comment to CARB and with the Joint Utilities Group to achieve greatest value for SMUD customers.
	Wildfire						In 2022, the work to underground the 4kV lines at the UARP was completed. The 2023 Capital and O&M budget include funds to continue implementation of SMUD's Wildfire Mitigation Plan.
	Climate Change						SMUD has issued a task order to assess heat vulnerability of SMUD transformers and integrate EV and BE adoption projections into new transformer standards. Enterprise-wide vulnerability and residual risk assessment or targeted assessment of Zero Carbon Plan technologies pending funding and management prioritization.
	Pandemic						During 2022, SMUD Safety, Emergency Planning (EP), and Workforce, Diversity, and Inclusion (WDI), herein referred to as the COVID response team, continued to provide COVID-19 prevention guidance to its employees and contractors. In addition, staff continued to track COVID-19 regulatory changes with the Centers for Disease Control (CDC), California Department of Public Health, and Cal-OSHA, as well as participation in utility roundtables that discussed COVID-19 controls and remote work re-entry planning. Regulatory and roundtable information was used to update COVID-19 prevention guidance, facility openings, community event planning, customer service support, and travel/training protocols. SMUD continues to be able to provide COVID-19 antigen testing at its onsite medical service center with confirmation molecular testing at a third-party test laboratory. SMUD hired a 3rd party COVID support specialty company named Axiom to assist in supporting contact tracing and employee notification requirements. SMUD continues to maintain contractor COVID-19 prevention guidance, remote work support, and wellness/exposure requirements on the SMUD COVID homepage. These have assisted SMUD in providing



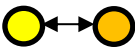
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Risk Category	Risk	Risk Trend	Target	2023 Risk Mitigation			
		2020	2021	2022	Trend	Target	
							reliable power and quality customer service while protecting our employees and the public during the pandemic. The SMUD's COVID response team will continue to track regulatory changes and update guidance as needed. In addition, the team continues to work with IT and Facilities to support the re-entry plan of its remote work employees. The re-entry plan has been followed and provided a phased employee return throughout 2022. Re-entry controls to ensure the safety of our employees include mandatory on-line re-entry training; frequent sanitation of work areas; conference room scheduling/cleaning; adoption of a hybrid work schedules; Personal Protective Equipment usage at lobby entries and vending machines. Facilities and Safety has installed an air ionization filtration in a few operational areas to support returning personnel. Lastly, Safety continues to work with hybrid remote working staff to ensure that they have ergonomic workstations at home and work.

TOP 10 ENTERPRISE RISKS COMPARED TO SMUD'S ENTERPRISE RISK CATEGORIES
Specific to Energy and Utilities Industry



Benchmarking Information indicates that SMUD's risks are consistent with other energy and utilities; one indicator that we are aligned in our understanding of risks facing our industry.

North Carolina State ERM Initiative and Protiviti Top 10 Enterprise Risks		SMUD's Corresponding Risks	SMUD's Current Residual Risk Exposure
Specific to Energy and Utilities Industry			
1	Succession challenges, ability to attract and retain top talent	Operational risk: Strategic workforce agility Competitive workforce total rewards Diversity, Equity, Inclusion and Belonging Change Management	
2	Uncertainties in supply chain including the viability of key suppliers, scarcity of supplies, volatile shipping and delivery options, or stable prices in the supply chain ecosystem may make it difficult to deliver services	Operational risk: Supply Chain	
3	Regulatory changes and scrutiny heightened, impacting how processes are designed and how products or services are produced and delivered	Operational risk: Regulatory compliance Strategic risk: 2030 Zero Carbon Plan Carbon emissions Renewable Portfolio Standards CEC: Integrated Resource Planning External risk: Legislative & regulatory Natural hazards	The current residual risk exposure ranges from medium to high 
4	Growing focus on climate change policies, regulations and expanding disclosure requirements as well as stakeholder expectations on climate change, supply chain transparency, reward systems, and other governance and sustainability issues may require us to significantly alter strategy and business model in ways that	Operational risk: Regulatory compliance Strategic risk: 2030 Zero Carbon Plan Carbon emissions Renewable Portfolio Standards CEC: Integrated Resource Planning Innovation	The current residual risk exposure ranges from

TOP 10 ENTERPRISE RISKS COMPARED TO SMUD'S ENTERPRISE RISK CATEGORIES
Specific to Energy and Utilities Industry

North Carolina State ERM Initiative and Protiviti Top 10 Enterprise Risks		SMUD's Corresponding Risks	SMUD's Current Residual Risk Exposure
Specific to Energy and Utilities Industry			
	may be difficult to implement on a timely basis.	External risk: Legislative & regulatory Economic business agility Natural hazards Climate Change	medium to high 
5	Resistance to change in our culture may restrict our organization from making necessary adjustments to the business model and core operations	Operational risk: Strategic workforce agility Operational excellence Diversity, Equity, Inclusion and Belonging Change Management Strategic risk: Innovation 2030 Zero Carbon Plan	
6	Our organization's culture may not sufficiently encourage the timely identification and escalation of risk issues and market opportunities that have the potential to significantly affect our core operations and achievement of strategic objectives	Operational risk: Strategic workforce agility Operational excellence Diversity, Equity, Inclusion and Belonging Change Management Strategic risk: Innovation 2030 Zero Carbon Plan	
7	Third-party risks arising from our reliance on outsourcing and strategic sourcing arrangements, IT vendor contracts, and other partnerships/joint ventures to achieve operational goals may prevent us from meeting organizational targets or impact our brand image	Operational risk: Supply chain Technology Systems Infrastructure Strategic risk: Innovation 2030 Zero Carbon Plan	
8	Shifts in perspectives and expectations about social issues and priorities surrounding diversity, equity and inclusion are occurring faster than the pace at which our organization is motivated and able to manage effectively (e.g., recruiting, retention, career advancement, reward systems, behavioral incentives, shared values, and culture), which may	Operational risk: Strategic workforce agility Operational excellence Diversity, Equity, Inclusion and Belonging Change Management Workforce Total Rewards Strategic risk: Innovation	

TOP 10 ENTERPRISE RISKS COMPARED TO SMUD'S ENTERPRISE RISK CATEGORIES
Specific to Energy and Utilities Industry

North Carolina State ERM Initiative and Protiviti Top 10 Enterprise Risks		SMUD's Corresponding Risks	SMUD's Current Residual Risk Exposure
Specific to Energy and Utilities Industry			
	significantly impact our ability to attract/retain talent and compete in the marketplace		
9	Privacy/identity management and information security protection Our organization may not be sufficiently prepared to manage cyber threats such as ransomware and other attacks that have the potential to significantly disrupt core operations and/or damage our brand	Operational risk: Cyber security Privacy	
10	Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization	Strategic risk: Innovation 2030 Zero Carbon Plan Changing Customer Expectations External risk: Business agility	

RESOLUTION NO. _____

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

This Board accepts the monitoring report for **Strategic Direction SD-17, Enterprise Risk Management**, substantially in the form set forth in **Attachment ____** hereto and made a part hereof.

SSS No.

CFO 22-016

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Policy – 11/16/22Board Meeting Date
November 17, 2022

TO				TO							
1.	Jennifer Davidson			6.							
2.	Brandy Bolden			7.							
3.	Farres Everly			8.							
4.	Suresh Kotha			9.	Legal						
5.				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) Lisa Limcaco				DEPARTMENT Accounting				MAIL STOP B351		EXT. 7045	
								DATE SENT 10/28/2022			

NARRATIVE:

Requested Action: Authorize SMUD's Accountant to defer recognition of certain expenses related to the net Pension and net other post-employment benefits (OPEB) liability in order to match such costs in the appropriate accounting period for rate-making purposes.

Summary: Governmental Accounting Standards Board (GASB) 68 regarding Pension accounting and GASB 75 regarding OPEB accounting required SMUD to record non-cash accounting journal entries for certain annual changes in the actuarial valuation in the net Pension and OPEB liabilities. These changes may have significant negative financial impacts to SMUD's financial statements. In order to minimize these financial impacts in the future and match revenue requirements with Pension and OPEB expenses, staff is recommending that the Board authorize deferring expenses related to the net Pension and OPEB liability as a regulatory asset in order to match such costs in the appropriate accounting period for rate-making purposes. It is expected that amortization of the regulatory asset will begin in 2022 with the receipt of the annual actuarial report for GASB 68 and GASB 75.

Board Policy: Access to credit markets SD-3. Allows SMUD to match revenues and expenses for ratemaking purposes.
(Number & Title)

Benefits: This accounting treatment will offset any negative significant financial impacts in the future which could have an impact on rate payers.

Cost/Budgeted: N/A

Alternatives: Record non-cash accounting journal entries for changes in Pension and OPEB liabilities as required by GASB 68 and GASB 75. When negative significant financial impacts occur in the future that leads to a net loss, this could lead to increases to SMUD rate payers.

Affected Parties: Accounting, Budget, Treasury

Coordination: Accounting, Budget, Treasury

Presenter: Lisa Limcaco, Director of Accounting and Controller

Additional Links:

SUBJECT

Regulatory Accounting for Pension and Other Post-Employment Benefits

ITEM NO. (FOR LEGAL USE ONLY)

12

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, Governmental Accounting Standards Board Statement No. 68 (**GASB 68**) regarding Pension accounting and Governmental Accounting Standards Board Statement No. 75 (**GASB 75**) regarding other post-employment benefits (OPEB) accounting required SMUD to record non-cash accounting journal entries for certain annual charges in the actuarial valuation in the net Pension and OPEB liabilities; and

WHEREAS, these changes may have significant negative financial impacts to SMUD's financial statements; and

WHEREAS, in order to minimize these financial impacts in the future and match revenue requirements with Pension and OPEB expenses, staff recommends the Board authorize deferral of expenses related to the net Pension and OPEB liability as a regulatory asset in order to match such costs in the appropriate accounting period for rate-making purposes; and

WHEREAS, it is expected that amortization of the regulatory asset will begin in 2022 with the receipt of the annual actuarial report for **GASB 68** and **GASB 75**; and

WHEREAS, normal accounting practices would be to recognize the revenues and expenses in the accounting period incurred; and

WHEREAS, for rate-making purposes, it would be appropriate to match the expenses with the revenues so that the revenue is recognized in the same period in

which the amount is expended and will, therefore, more accurately reflect revenues and expenses in the same period; **NOW, THEREFORE,**

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

That this Board authorizes SMUD's Accountant to defer recognition of certain expenses related to the net Pension and net other post-employment benefits (OPEB) liability in order to match such costs in the appropriate accounting period for rate-making purposes.

SSS No.

CFO 22-015

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Policy – 11/16/22Board Meeting Date
November 17, 2022

TO				TO			
1.	Jennifer Davidson			6.			
2.	Brandy Bolden			7.			
3.	Farres Everly			8.			
4.	Suresh Kotha			9.	Legal		
5.				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) Lisa Limcaco				DEPARTMENT Accounting		MAIL STOP B351	EXT. 7045
						DATE SENT 10/28/2022	

NARRATIVE:**Requested Action:** Authorize SMUD's Accountant to:

- Utilize \$41 million of deferred operating revenues in order to offset future Community Impact Plan expenditures from 2022 through 2025 in order to match such expenditures in the appropriate accounting period for rate-making purposes; and
- Defer recognition of commodity expenditures for the year ending December 31, 2022, for an amount in that net income equals to at least \$1 million, as a regulatory asset in order to match such expenditures in the appropriate accounting period for rate-making purposes.

Summary: Pursuant to Governmental Accounting Standards Board (GASB) codification section Re10 Regulated Operations, staff is recommending that the Board authorize the utilization of \$41.0 million of deferred operating revenues in order to offset future Community Impact Plan expenditures from 2022 through 2025. This utilization of deferred revenues is in line with the plan to offset additional 2030 Zero Carbon Plan spending for pilots and programs. This deferral will allow for appropriate matching of revenue with expense recognition for rate making purposes.

Due to the prolonged outage of the Cosumnes Power Plant and the heat storm in September 2022, commodities costs have increased significantly leading to augmentation of the commodity budget by \$309.3 million in October 2022. Due to the negative financial impact to the financial statements and uncertainty of SMUD financial position at December 31, 2022, staff is recommending that the Board authorize deferring commodity expenses for the year ending December 31, 2022, for an amount in that net income equals to at least \$1 million, as a regulatory asset in order to match such costs in the appropriate accounting period for rate-making purposes. It is expected that the regulatory asset will be recognized in the future when insurance proceeds are received for the business interruption insurance claim for Cosumnes Power Plant.

Board Policy: Strategic Direction SD-2, Competitive Rates - allows SMUD to limit or level the impact of increases in rates.
(Number & Title)

Benefits: This accounting treatment will offset any negative significant financial impacts of unforeseen or one-time events which could have an impact on rate payers.

Cost/Budgeted: N/A

Alternatives: Recognize as expenditures when incurred. The additional costs could lead to increases to SMUD rate payers.

Affected Parties: Accounting, Budget, Treasury

Coordination: Accounting, Budget, Treasury

Presenter: Lisa Limcaco, Director of Accounting and Controller

Additional Links:

SUBJECT

Utilization of Regulatory Accounting for Expenditures

ITEM NO. (FOR LEGAL USE ONLY)

13a

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, pursuant to Governmental Accounting Standards Board (GASB) codification section Re10 Regulated Operations, staff recommends the Board authorize utilization of \$41 million of deferred operating revenues in order to offset future Community Impact Plan expenditures from 2022 through 2025; and

WHEREAS, this utilization of deferred revenues is in line with the plan to offset additional **2030 Zero Carbon Plan** spending for pilots and programs; and

WHEREAS, normal accounting practices would be to recognize the revenues and expenses in the accounting period incurred; and

WHEREAS, pursuant to Governmental Accounting Standards Board (GASB) codification section Re10 Regulated Operations, for rate-making purposes, it would be appropriate to match the expenses with the revenues so that the revenue is recognized in the same period in which the amount is expended and will, therefore, more accurately reflect revenues and expenses in the same period; **NOW, THEREFORE,**

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

That this Board authorizes SMUD's Accountant to utilize \$41 million of deferred operating revenues in order to offset future Community Impact Plan expenditures from 2022 through 2025 in order to match such expenditures in the appropriate accounting period for rate-making purposes.

SSS No.

CFO 22-015

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Policy – 11/16/22Board Meeting Date
November 17, 2022

TO				TO			
1.	Jennifer Davidson			6.			
2.	Brandy Bolden			7.			
3.	Farres Everly			8.			
4.	Suresh Kotha			9.	Legal		
5.				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) Lisa Limcaco				DEPARTMENT Accounting		MAIL STOP B351	EXT. 7045
						DATE SENT 10/28/2022	

NARRATIVE:**Requested Action:** Authorize SMUD's Accountant to:

- Utilize \$41 million of deferred operating revenues in order to offset future Community Impact Plan expenditures from 2022 through 2025 in order to match such expenditures in the appropriate accounting period for rate-making purposes; and
- Defer recognition of commodity expenditures for the year ending December 31, 2022, for an amount in that net income equals to at least \$1 million, as a regulatory asset in order to match such expenditures in the appropriate accounting period for rate-making purposes.

Summary: Pursuant to Governmental Accounting Standards Board (GASB) codification section Re10 Regulated Operations, staff is recommending that the Board authorize the utilization of \$41.0 million of deferred operating revenues in order to offset future Community Impact Plan expenditures from 2022 through 2025. This utilization of deferred revenues is in line with the plan to offset additional 2030 Zero Carbon Plan spending for pilots and programs. This deferral will allow for appropriate matching of revenue with expense recognition for rate making purposes.

Due to the prolonged outage of the Cosumnes Power Plant and the heat storm in September 2022, commodities costs have increased significantly leading to augmentation of the commodity budget by \$309.3 million in October 2022. Due to the negative financial impact to the financial statements and uncertainty of SMUD financial position at December 31, 2022, staff is recommending that the Board authorize deferring commodity expenses for the year ending December 31, 2022, for an amount in that net income equals to at least \$1 million, as a regulatory asset in order to match such costs in the appropriate accounting period for rate-making purposes. It is expected that the regulatory asset will be recognized in the future when insurance proceeds are received for the business interruption insurance claim for Cosumnes Power Plant.

Board Policy: Strategic Direction SD-2, Competitive Rates - allows SMUD to limit or level the impact of increases in rates.
(Number & Title)

Benefits: This accounting treatment will offset any negative significant financial impacts of unforeseen or one-time events which could have an impact on rate payers.

Cost/Budgeted: N/A

Alternatives: Recognize as expenditures when incurred. The additional costs could lead to increases to SMUD rate payers.

Affected Parties: Accounting, Budget, Treasury

Coordination: Accounting, Budget, Treasury

Presenter: Lisa Limcaco, Director of Accounting and Controller

Additional Links:

SUBJECT

Utilization of Regulatory Accounting for Expenditures

ITEM NO. (FOR LEGAL USE ONLY)

13b

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, due to the prolonged outage of the **Cosumnes Power Plant** and the heat storm in September 2022, commodities costs have increased significantly; and

WHEREAS, by Resolution No. 22-10-09, adopted on October 20, 2022, this Board approved augmentation to the 2022 Budget Resolution to increase the line item expenditure for Commodity by \$309.3 million; and

WHEREAS, due to the negative financial impact to the financial statements and uncertainty of SMUD financial position at December 31, 2022, staff recommends the Board authorize deferral of commodity expenses for the year ending December 31, 2022, for an amount in that net income equals to at least \$1 million, as a regulatory asset in order to match such costs in the appropriate accounting period for rate-making purposes; and

WHEREAS, it is expected that the regulatory asset will be recognized in the future when insurance proceeds are received for the business interruption insurance claim for **Cosumnes Power Plant**; and

WHEREAS, normal accounting practices would be to recognize the revenues and expenses in the accounting period incurred; and

WHEREAS, pursuant to Governmental Accounting Standards Board (GASB) codification section Re10 Regulated Operations, for rate-making purposes, it would be appropriate to match the expenses with the revenues so that the revenue is recognized in the same period in which the amount is expended and will, therefore,

more accurately reflect revenues and expenses in the same period; **NOW,**
THEREFORE,

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

That this Board authorizes SMUD's Accountant to defer recognition of commodity expenditures for the year ending December 31, 2022, for an amount in that net income equals to at least \$1 million, as a regulatory asset in order to match such expenditures in the appropriate accounting period for rate-making purposes.

SSS No.

BOD 2022 - 007

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date

Policy - November 16, 2022

Board Meeting Date

November 17, 2022

TO					TO				
1.	Jennifer Davidson				6.				
2.	Suresh Kotha				7.				
3.	Brandy Bolden				8.				
4.	Farres Everly				9.	Legal			
5.					10.	CEO & General Manager			

Consent Calendar	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No <i>If no, schedule a dry run presentation.</i>	Budgeted	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No <i>(If no, explain in Cost/Budgeted section.)</i>
FROM (IPR) Dave Tamayo / Donna Lofton					DEPARTMENT Board Office			MAIL STOP B307	EXT. 5079
								DATE SENT 10/10/22	

NARRATIVE:

Requested Action: Allow the Board of Directors an opportunity to discuss Board Officer positions for 2023.

Summary: The directors will discuss and make recommendations for Board President and Vice President for January through December of the upcoming year.

Benefits: Having this discussion will allow the directors a forum to voice their choices for President and Vice President for the upcoming year.

Board Policy: GP-5 Election of the Board President and Vice President states that the Board shall select a President and Vice President each year to preside over it. This discussion supports the governance process.
(Number & Title)

Cost/Budgeted: N/A

Alternatives: Not select Board Officers at this time.

Affected Parties: Board of Directors

Coordination: Donna Lofton

Presenter: Brandon Rose, Board President

Additional Links:

SUBJECT	Board Officers for 2023	ITEM NO. (FOR LEGAL USE ONLY)
		14

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, President Rose called for the election of the President of the Board of Directors for the year 2023; and

WHEREAS, _____ nominated
_____ for the position of President of the Board of Directors for 2023;
and

WHEREAS, hearing no other nominations, the President closed the nominations and proceeded to a vote; **NOW, THEREFORE**,

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

That this Board hereby elects _____ to serve as
President of the Board of Directors for the 2023 term commencing January 1, 2023,
through December 31, 2023.

RESOLUTION NO. _____

WHEREAS, President Rose called for the election of the Vice President of the Board of Directors for the year 2023; and

WHEREAS, _____ nominated
_____ for the position of Vice President of the Board of Directors for 2023; and

WHEREAS, hearing no other nominations, the President closed the nominations and proceeded to a vote; **NOW, THEREFORE**,

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

That this Board hereby elects _____ to serve as Vice President of the Board of Directors for the 2023 term commencing January 1, 2023, through December 31, 2023.

SSS No.
CFO 21-018

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Board Meeting Date November 17, 2022

TO				TO						
1.	Jennifer Davidson			6.						
2.				7.						
3.				8.						
4.				9.	Legal					
5.				10.	CEO & General Manager					
Consent Calendar		Yes	No If no, schedule a dry run presentation.		Budgeted		Yes	No (If no, explain in Cost/Budgeted section.)		
FROM (IPR) Lisa Limcaco				DEPARTMENT Accounting				MAIL STOP B352	EXT. 6957	DATE SENT 8/2/22

NARRATIVE:

Requested Action: Provide the Board with SMUD's financial results for the year-to-date period in 2022, and a summary of SMUD's current Power Supply Costs.

Summary: Staff will present SMUD's financial results for the year-to-date period in 2022, and a summary of SMUD's current Power Supply Costs to the Board of Directors.

Board Policy: GP-3, Board Job Description
(Number & Title)

Benefits: Provides Board members with information regarding SMUD's financial condition and SMUD's current power supply costs.

Cost/Budgeted: N/A

Alternatives: N/A

Affected Parties: Accounting

Coordination: Accounting

Presenter: Lisa Limcaco, Director of Accounting & Controller

Additional Links:

SUBJECT	SMUD's 2022 Year-to-Date Financial Results & Power Supply Costs	ITEM NO. (FOR LEGAL USE ONLY) 15
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT
OFFICE MEMORANDUM

TO: Distribution

DATE: October 31, 2022
ACC 22-024

FROM: Kathy Ketchum / Lisa Limcaco

SUBJECT: SEPTEMBER 2022 FINANCIAL RESULTS AND OPERATIONS DATA

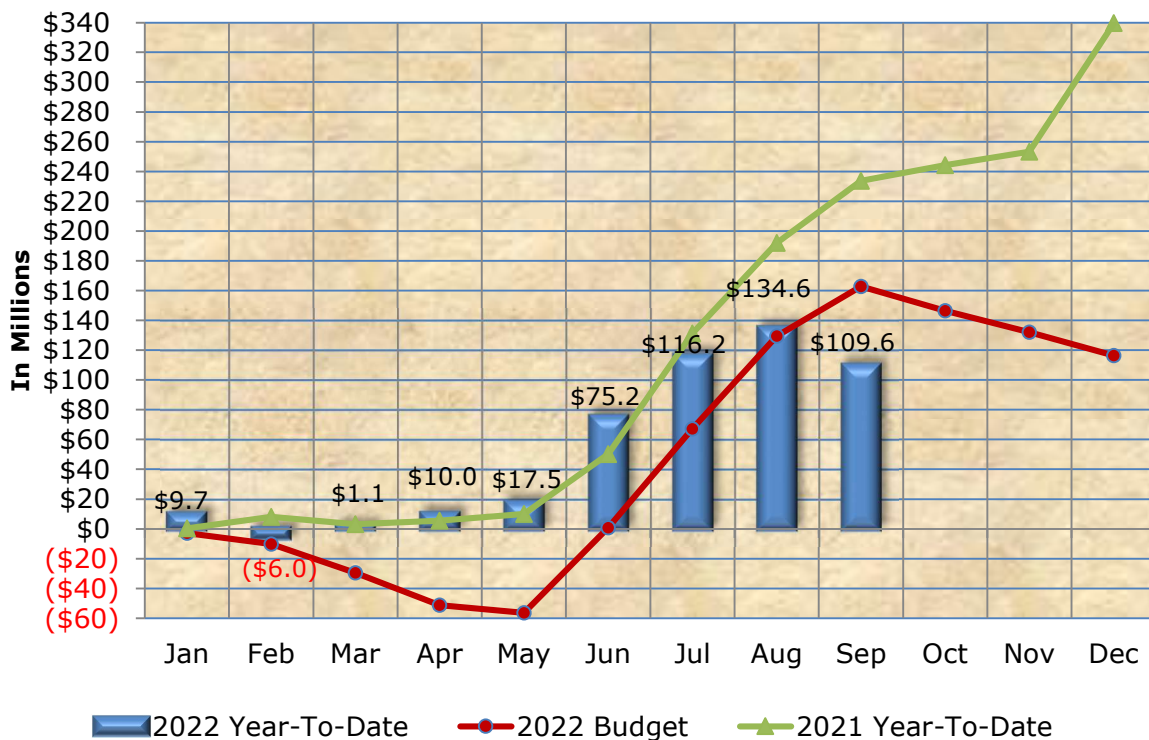
We are attaching the financial and operating reports for the nine months of 2022. They include sales and generation statistics and other selected data.

The change in net position is an increase of \$109.6 million compared to a budgeted increase of \$162.8 million, resulting in an unfavorable variance of \$53.2 million.

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 2022 Budget approved by the Board of Directors on December 9, 2021.

Change in Net Position Year To Date



**SACRAMENTO MUNICIPAL UTILITY DISTRICT
EXECUTIVE SUMMARY
For the Nine Months Ended September 30, 2022**

Net Position

- The change in net position is an increase of \$109.6 million compared to a budgeted increase of \$162.8 million, resulting in an unfavorable variance of \$53.2 million.

Revenues

- Revenues from sales to customers were \$1,274.6 million, which was \$70.3 million higher than planned.
 - The increase is primarily due to higher commercial customer revenues of \$47.0 million, higher residential sales of \$22.3 million, and lower provision for uncollectible accounts of \$13.2 million, offset by a \$13.3 million year-to-date adjustment of commercial customer revenues related to the 2021 estimated unbilled revenues.
- Revenues under the California Global Warming Solutions Act (Assembly Bill [AB] - 32) were \$17.4 million. This is due to carbon allowances sold through the state sanctioned quarterly auctions.
- Low Carbon Fuel Standard (LCFS) revenues were \$7.0 million, which was \$7.5 million lower than planned due to a decrease in price per credit and the timing of credit sales.
- Non-cash revenues transferred to the rate stabilization fund were \$24.4 million, of which \$17.4 million was for AB-32 and \$7.0 million was for LCFS. Funds are deferred until SMUD has qualified program expenses (projects that reduce carbon emissions or electric vehicle programs) to recognize revenue.
- Non-cash revenues transferred from the rate stabilization fund were \$30.8 million, of which \$25.1 million was for revenue recognized for the annual Hydro rate adjustment and \$5.7 million was for revenues recognized from LCFS electric vehicle programs expenses.
- Other electric revenues were higher by \$7.8 million primarily due to higher Procter & Gamble Power Plant steam sales, transmission revenue and interconnection fees, offset by lower Greenergy revenue.

Commodities, Purchased Power and Production

Overall, load was higher than planned. Both thermal and hydro generation were lower than planned due to Cosumnes Power Plant outage and precipitation levels, respectively. This resulted in lower fuel usage, decreased net price per MMBTU (due to increased fuel sales), and additional purchased power expense.

- SMUD's generation was lower by 1,960 GWh (35.8 percent); JPA and other generation was lower by 1,626 GWh (37.5 percent); and Hydro generation was lower by 334 GWh (29.4 percent).
- Purchased power expense of \$635.6 million, less surplus power sales of \$119.7 million, was \$515.9 million, which was \$355.6 million higher than planned. Purchased power expense increased because of higher prices of \$220.8 million and higher quantities purchased of \$134.8 million due to the procuring of replacement power for the Cosumnes Power Plant (CPP) unplanned outage.
- Production operations cost of \$281.4 million, less surplus gas sales of \$159.5 million, was \$121.9 million, which was \$80.3 million lower than planned.
 - Fuel costs of \$160.7 million, less surplus gas sales of \$159.5 million, was \$1.2 million, which was \$109.4 million lower than planned. This is primarily due to lower fuel prices of \$72.2 million and lower fuel usage of \$37.2 million. Lower fuel usage is primarily due to the CPP unplanned outage. The lower price variance is due to surplus gas sales, natural gas hedging activities, and higher sales price per Renewable Identification Number (RIN), which resulted in sales of \$2.4 million higher than planned.
 - Offset by higher carbon allowances of \$8.8 million due to higher Calpine purchases due to lower hydro and thermal generation.
- The "power margin", or sales to customers less cost of purchased power, production operations costs and gas hedges included in investment revenue was \$663.2 million, which was \$178.6 million lower than planned. The power margin as a percentage of sales to customers was 52.0 percent, which was 17.9 percent lower than planned. This is primarily due to the additional purchased power for the replacement power for the unplanned outage at CPP.

Other Operating Expenses

- All other operating expenses were \$578.5 million, which was \$94.5 million lower than planned.
 - Transmission and distribution operation expenses were higher by \$5.6 million primarily due to higher TANC management and transmission trading expenses.

- Customer accounts expenses were \$6.3 million lower than planned primarily in Revenue Assurance due to vacancies and labor charged to projects.
- Customer service and information expenses were \$15.1 million lower than planned primarily due to lower than anticipated transportation electrification expenses due to a DOE grant not awarded for the Equity EV program, customer program expenses are lower due to supply chain issues and delays that affected customer participation, lower load management program expenses due to delayed launch of My Energy Optimizer, and lower Greenergy Recs and Carbon Offsets.
- Administrative and General expenses were down \$6.3 million primarily due to lower labor in new business development and enterprise strategy and lower labor and outside services in market development.
- Public good expenses were \$6.0 million lower than planned primarily due to a delay in Storage and Generation Research Projects, research and development labor being charged to technology areas, lower than plan incentives in Energy Storage and EV's, and overall fewer projects completed than planned.
- Production maintenance expenses were \$3.1 million lower than planned primarily due to lower hydro maintenance costs and storm repairs completed earlier and at less cost than forecasted.
- Transmission and distribution maintenance expenses were \$4.0 million higher than planned. This is primarily due to higher service reconnect and repair expenses and underground line corrective maintenance caused by completing more work than planned for year-to-date, and higher station equipment preventative maintenance and onboarding/training of 13 new apprentices.
- Negative non-cash amortization of pension and other post-employment benefits (OPEB) was \$68.4 million lower than planned, which resulted in a positive impact to net position. This is due to Governmental Accounting Standards Board (GASB) 68 Pension and GASB 75 OPEB negative amortizations.

Non-operating Revenues and Expenses

- Other revenue, net, was \$30.6 million higher than planned primarily due to higher investment revenue of \$26.3 million due to natural gas hedging activities, \$4.0 million higher interest income, \$3.6 million higher contributions in aid of construction due to differences between accounting treatment of offsets and amounts recorded for budget purposes, and \$1.1 million due to a refund stemming from prior years purchased power expense related to the Simpson Biomass contract that ended in 2021. These are offset by unrealized holding losses of \$6.0 million.
- Interest charges were \$2.6 million lower than planned due to lower amortization on revenue bonds, lower interest expense on long-term debt and lower commercial paper fees.

SACRAMENTO MUNICIPAL UTILITY DISTRICT
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
For the Month Ended September 30, 2022
(thousands of dollars)

	<u>Actual</u>	<u>Budget</u>	<u>Over (Under)</u>	<u>Percent of Increase (Decrease)</u>
OPERATING REVENUES				
Sales to customers	\$ 177,363	\$ 157,247	\$ 20,116	12.8 %
Sales of surplus power	18,632	23,730	(5,098)	(21.5)
Sales of surplus gas	17,800	-	17,800	*
LCFS revenue	-	2,027	(2,027)	(100.0)
Other electric revenue	3,915	2,539	1,376	54.2
Revenue from rate stabilization fund	578	-	578	*
Total operating revenues	218,288	185,543	32,745	17.6
OPERATING EXPENSES				
Operations				
Purchased power	137,980	38,437	99,543	259.0
Production	36,238	25,303	10,935	43.2
Transmission and distribution	8,580	7,634	946	12.4
Customer accounts	4,241	5,439	(1,198)	(22.0)
Customer service and information	5,878	7,815	(1,937)	(24.8)
Administrative and general	13,314	15,533	(2,219)	(14.3)
Public good	5,269	6,356	(1,087)	(17.1)
Total operations	211,500	106,517	104,983	98.6
Maintenance				
Production	3,557	4,552	(995)	(21.9)
Transmission and distribution	11,424	11,842	(418)	(3.5)
Total maintenance	14,981	16,394	(1,413)	(8.6)
Depreciation and amortization				
Depreciation	18,668	18,926	(258)	(1.4)
Amortization of pension and OPEB	(6,515)	1,087	(7,602)	(699.4)
Amortization of regulatory asset	2,910	2,881	29	1.0
Total depreciation and amortization	15,063	22,894	(7,831)	(34.2)
Total operating expenses	241,544	145,805	95,739	65.7
OPERATING INCOME (LOSS)	(23,256)	39,738	(62,994)	(158.5)
NON-OPERATING REVENUES AND EXPENSES				
Other revenues/(expenses)				
Interest income	1,466	325	1,141	351.1
Investment revenue (expense)	5,562	(159)	5,721	*
Other income (expense) - net	966	772	194	25.1
Unrealized holding gains (losses)	(3,002)	-	(3,002)	*
Revenue - CIAC	1,573	1,164	409	35.1
Total other revenues	6,565	2,102	4,463	212.3
Interest charges				
Interest on long-term debt	7,876	8,390	(514)	(6.1)
Interest on commercial paper	373	180	193	107.2
Total interest charges	8,249	8,570	(321)	(3.7)
CHANGE IN NET POSITION	\$ (24,940)	\$ 33,270	\$ (58,210)	(175.0) %

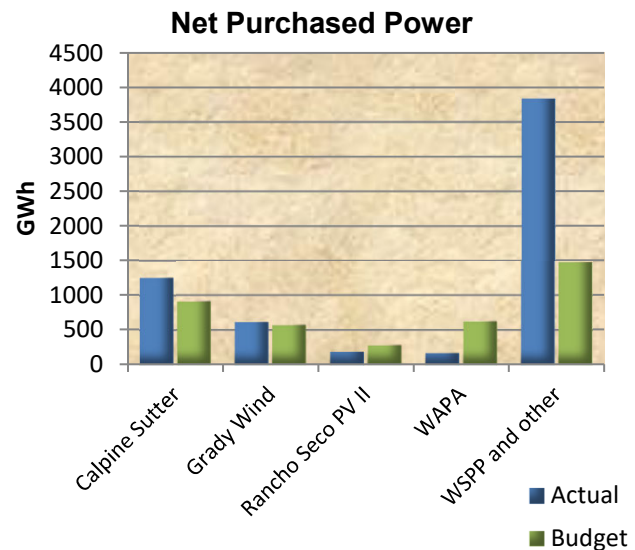
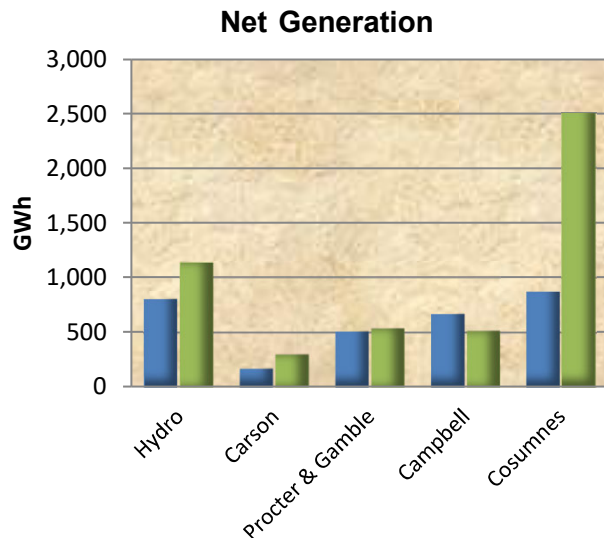
SACRAMENTO MUNICIPAL UTILITY DISTRICT
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
For the Nine Months Ended September 30, 2022
(thousands of dollars)

	Actual	Budget	Over (Under)	Percent of Increase (Decrease)
OPERATING REVENUES				
Sales to customers	\$ 1,274,632	\$ 1,204,303	\$ 70,329	5.8 %
Sales of surplus power	119,655	164,789	(45,134)	(27.4)
Sales of surplus gas	159,529	-	159,529	*
SB-1 revenue (deferral)/recognition, net	15	-	15	*
AB32 revenue	17,400	-	17,400	*
LCFS revenue	6,957	14,502	(7,545)	(52.0)
Other electric revenue	32,727	24,940	7,787	31.2
Revenue to rate stabilization fund	(24,437)	-	(24,437)	*
Revenue from rate stabilization fund	30,804	-	30,804	*
Total operating revenues	1,617,282	1,408,534	208,748	14.8
OPERATING EXPENSES				
Operations				
Purchased power	635,556	325,115	310,441	95.5
Production	281,394	202,205	79,189	39.2
Transmission and distribution	68,462	62,857	5,605	8.9
Customer accounts	39,366	45,688	(6,322)	(13.8)
Customer service and information	48,435	63,544	(15,109)	(23.8)
Administrative and general	121,489	127,835	(6,346)	(5.0)
Public good	39,298	45,285	(5,987)	(13.2)
Total operations	1,234,000	872,529	361,471	41.4
Maintenance				
Production	34,636	37,782	(3,146)	(8.3)
Transmission and distribution	91,728	87,750	3,978	4.5
Total maintenance	126,364	125,532	832	0.7
Depreciation and amortization				
Depreciation	166,538	166,485	53	0.0
Amortization of pension and OPEB	(58,638)	9,780	(68,418)	(699.6)
Amortization of regulatory asset	27,145	25,927	1,218	4.7
Total depreciation and amortization	135,045	202,192	(67,147)	(33.2)
Total operating expenses	1,495,409	1,200,253	295,156	24.6
OPERATING INCOME	121,873	208,281	(86,408)	(41.5)
NON-OPERATING REVENUES AND EXPENSES				
Other revenues/(expenses)				
Interest income	6,964	2,974	3,990	134.2
Investment revenue (expense)	25,115	(1,532)	26,647	*
Other income (expense) - net	23,956	21,528	2,428	11.3
Unrealized holding gains (losses)	(5,991)	-	(5,991)	*
Revenue - CIAC	14,026	10,455	3,571	34.2
Total other revenues	64,070	33,425	30,645	91.7
Interest charges				
Interest on long-term debt	75,255	77,352	(2,097)	(2.7)
Interest on commercial paper	1,036	1,542	(506)	(32.8)
Total interest charges	76,291	78,894	(2,603)	(3.3)
CHANGE IN NET POSITION	\$ 109,652	\$ 162,812	\$ (53,160)	(32.7) %

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
SOURCES AND USES OF ENERGY - COMPARED TO BUDGET
For the Period Ended September 30, 2022**

Sources of Energy (GWh)	Month		Increase (Decrease)	Year to Date		Increase (Decrease)
	Actual	Budget	Percentage	Actual	Budget	Percentage
Net Generated						
Hydro	128	106	20.8	801	1,135	(29.4)
Carson Power Plant	22	44	(50.0)	170	296	(42.6)
Procter & Gamble Power Plant	59	78	(24.4)	509	534	(4.7)
Campbell Power Plant	81	94	(13.8)	668	510	31.0
Cosumnes Power Plant	51	347	(85.3)	870	2,501	(65.2)
Other	49	59	(16.9)	493	495	(0.4)
Total net generation	390	728	(46.4)	3,511	5,471	(35.8)
Purchased Power less transmission losses:						
CalEnergy	14	18	(22.2)	168	167	0.6
Calpine Sutter	152	160	(5.0)	1,258	909	38.4
Drew Solar	25	27	(7.4)	37	229	(83.8)
Feed in Tariff	18	20	(10.0)	180	179	0.6
Grady Wind	67	70	(4.3)	615	573	7.3
Rancho Seco PV II	19	32	(40.6)	187	278	(32.7)
WAPA	11	56	(80.4)	171	621	(72.5)
WSPP and other	555	76	630.3	3,837	1,472	160.7
Other long term power	46	57	(19.3)	448	522	(14.2)
Total net purchases	907	516	75.8	6,901	4,950	39.4
Total sources of energy	1,297	1,244	4.3	10,412	10,421	(0.1)
Uses of energy:						
SMUD electric sales and usage	1,022	939	8.8	8,119	7,761	4.6
Surplus power sales	241	290	(16.9)	1,997	2,285	(12.6)
System losses	34	15	126.7	296	375	(21.1)
Total uses of energy	1,297	1,244	4.3 %	10,412	10,421	(0.1) %

* Change equals 1000% or more.



Net generation is lower than planned for the nine-month period.

- Hydro generation is lower than planned (29.4 percent).
- JPA generation is lower than planned (42.3 percent).

Purchased power, less surplus power sales, is higher than plan (84 percent).

SACRAMENTO MUNICIPAL UTILITY DISTRICT
STATEMENTS OF NET POSITION
September 30, 2022 and 2021
(thousands of dollars)

	<u>Total</u>						
	SMUD	Cosumnes	NCEA	NCGA #1	Intercompany Eliminations	2022	2021
ELECTRIC UTILITY PLANT							
Plant in service, original cost	\$ 5,888,097	\$ 947,041	\$ -	\$ -	\$ -	\$ 6,835,138	\$ 6,488,131
Less accumulated depreciation	2,775,385	670,599	-	-	-	3,445,984	3,271,402
Plant in service - net	3,112,712	276,442	-	-	-	3,389,154	3,216,729
Construction work in progress	492,770	20,104	-	-	-	512,874	563,211
Investment in Joint Power Agencies	309,614	-	-	-	(282,682)	26,932	22,497
Total electric utility plant - net	3,915,096	296,546	-	-	(282,682)	3,928,960	3,802,437
RESTRICTED ASSETS							
Revenue bond reserves	2,004	-	-	-	-	2,004	2,931
Restricted for payment of debt service	32,374	-	-	-	-	32,374	33,783
JPA funds	-	2,709	11,093	7,067	-	20,869	21,169
Nuclear decommissioning trust fund	8,915	-	-	-	-	8,915	8,874
Rate stabilization fund	182,625	-	-	-	-	182,625	161,766
Net pension asset	61,942	-	-	-	-	61,942	-
Net OPEB asset	34,223	-	-	-	-	34,223	770
Other funds	29,168	-	3,000	1	-	32,169	22,415
Due (to) from unrestricted funds (decommissioning)	(6,684)	-	-	-	-	(6,684)	(6,684)
Due (to) from restricted funds (decommissioning)	6,684	-	-	-	-	6,684	6,684
Less current portion	(40,366)	(2,705)	(14,093)	(7,068)	-	(64,232)	(74,527)
Total restricted assets	310,885	4	-	-	-	310,889	177,181
CURRENT ASSETS							
Cash, cash equivalents and investments							
Unrestricted	525,074	69,795	-	-	-	594,869	632,249
Restricted	40,366	2,705	14,093	7,068	-	64,232	74,527
Accounts receivable - net	324,948	25,005	6,182	2,319	(42,741)	315,713	297,826
Energy efficiency loans due within one year	201	-	-	-	-	201	2,691
Interest receivable	2,469	153	-	1	-	2,623	981
Regulatory costs to be recovered within one year	35,083	104	-	105	-	35,292	35,640
Derivative financial instruments maturing within in one year	83,116	-	-	-	-	83,116	69,436
Inventories	88,343	19,570	-	-	-	107,913	100,942
Prepaid gas to be delivered within one year	-	-	3,896	24,451	-	28,347	25,399
Prepayments and other	23,045	5,765	7	16	-	28,833	28,670
Total current assets	1,122,645	123,097	24,178	33,960	(42,741)	1,261,139	1,268,361
NONCURRENT ASSETS							
Regulatory costs for future recovery							
Decommissioning	72,318	-	-	-	-	72,318	78,175
Pension	327,774	-	-	-	-	327,774	344,801
OPEB	271,430	-	-	-	-	271,430	284,203
Bond Issues	-	705	-	393	-	1,098	1,307
Derivative financial instruments	(897)	-	-	-	-	(897)	4,006
Derivative financial instruments	113,772	-	-	-	-	113,772	51,762
Prepaid gas	-	-	526,166	119,099	-	645,265	673,613
Prepaid power and capacity	225	-	-	-	-	225	432
Energy efficiency loans - net	746	-	-	-	-	746	4,421
Other	68,406	4	-	59	-	68,469	58,532
Total noncurrent assets	853,774	709	526,166	119,551	-	1,500,200	1,501,252
TOTAL ASSETS	\$ 6,202,400	\$ 420,356	\$ 550,344	\$ 153,511	\$ (325,423)	\$ 7,001,188	\$ 6,749,231
DEFERRED OUTFLOWS OF RESOURCES							
Accumulated decrease in fair value of hedging derivatives	17,420	-	-	-	-	17,420	23,663
Deferred pension outflows	73,052	-	-	-	-	73,052	186,518
Deferred OPEB outflows	21,953	-	-	-	-	21,953	23,966
Deferred ARO outflows	-	1,442	-	-	-	1,442	1,473
Unamortized bond losses - other	7,676	1,262	-	-	-	8,938	13,055
TOTAL DEFERRED OUTFLOWS OF RESOURCES	120,101	2,704	-	-	-	122,805	248,675
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	\$ 6,322,501	\$ 423,060	\$ 550,344	\$ 153,511	\$ (325,423)	\$ 7,123,993	\$ 6,997,906

SACRAMENTO MUNICIPAL UTILITY DISTRICT
STATEMENTS OF NET POSITION
September 30, 2022 and 2021
(thousands of dollars)

	<u>Total</u>						
	SMUD	Cosumnes	NCEA	NCGA #1	Intercompany Eliminations	2022	2021
LONG-TERM DEBT - NET	\$ 2,134,210	\$ 96,028	\$ 548,111	\$ 120,070	\$ -	\$ 2,898,419	3,092,268
CURRENT LIABILITIES							
Commercial paper notes	100,000	-	-	-	-	100,000	-
Accounts payable	112,247	8,939	3,655	728	(1)	125,568	105,220
Purchased power payable	144,226	11,699	-	-	(42,740)	113,185	37,172
Credit support collateral obligation	16,098	-	-	1	-	16,099	3,580
Long-term debt due within one year	111,165	1,845	-	22,865	-	135,875	132,150
Accrued decommissioning	6,889	-	-	-	-	6,889	6,751
Interest payable	22,153	1,122	5,438	809	-	29,522	29,462
Accrued salaries and compensated absences	43,814	-	-	-	-	43,814	50,212
Derivative financial instruments maturing within one year	13,794	-	-	-	-	13,794	17,506
Customer deposits	1,675	-	-	-	-	1,675	1,708
Other	48,649	-	-	-	-	48,649	26,665
Total current liabilities	620,710	23,605	9,093	24,403	(42,741)	635,070	410,426
NONCURRENT LIABILITIES							
Accrued decommissioning - net	74,550	9,021	-	-	-	83,571	88,998
Derivative financial instruments	6,818	-	-	-	-	6,818	13,935
Net pension liability	-	-	-	-	-	-	393,557
Net OPEB liability	-	-	-	-	-	-	23,263
Other	78,749	-	161	-	-	78,910	92,751
Total noncurrent liabilities	160,117	9,021	161	-	-	169,299	612,504
TOTAL LIABILITIES	2,915,037	128,654	557,365	144,473	(42,741)	3,702,788	4,115,198
DEFERRED INFLOWS OF RESOURCES							
Accumulated increase in fair value of hedging derivatives	191,192	-	-	-	-	191,192	116,305
Deferred pension inflows	186,248	-	-	-	-	186,248	3,553
Deferred OPEB inflows	71,153	-	-	-	-	71,153	44,813
Regulatory credits	554,467	-	-	-	-	554,467	513,719
Unamortized bond gains - other	8,064	-	-	-	-	8,064	9,612
Unearned revenue	3,317	15	-	-	-	3,332	3,463
TOTAL DEFERRED INFLOWS OF RESOURCES	1,014,441	15	-	-	-	1,014,456	691,465
NET POSITION							
Balance at beginning of year	2,292,641	283,722	(6,565)	9,838	(282,539)	2,297,097	1,957,511
Net increase (decrease) for the year	100,382	10,669	407	(275)	(1,531)	109,652	233,732
Member contributions (distributions) - net	-	-	(863)	(525)	1,388	-	-
TOTAL NET POSITION	2,393,023	294,391	(7,021)	9,038	(282,682)	2,406,749	2,191,243
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	\$ 6,322,501	\$ 423,060	\$ 550,344	\$ 153,511	\$ (325,423)	\$ 7,123,993	\$ 6,997,906

SACRAMENTO MUNICIPAL UTILITY DISTRICT
STATEMENTS OF CASH FLOWS
For the Period Ended September 30, 2022
(thousands of dollars)

	Month	Year to Date
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from customers	\$ 189,983	\$ 1,234,007
Receipts from surplus power and gas sales	43,051	269,540
Other receipts	18,517	148,922
Payments to employees - payroll and other	(35,355)	(299,945)
Payments for wholesale power and gas purchases	(178,368)	(737,596)
Payments to vendors/others	(38,482)	(334,011)
Net cash (used in) provided by operating activities	(654)	280,917
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Repayment of debt	-	(20,550)
Interest on debt	-	(27,031)
Net cash used in noncapital financing activities	-	(47,581)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Construction expenditures	(32,155)	(260,418)
Contributions in aid of construction	1,207	18,246
Net proceeds from bond issues	-	150,711
Repayments and refundings of debt	(6,262)	(269,385)
Issuance of commercial paper	50,000	100,000
Other receipts	11,786	14,326
Interest on debt	(898)	(107,999)
Net cash provided by (used in) capital and related financing activities	23,678	(354,519)
CASH FLOWS FROM INVESTING ACTIVITIES		
Sales and maturities of securities	53,680	342,925
Purchases of securities	(2,644)	(696,931)
Interest and dividends received	1,666	5,258
Investment revenue/expenses - net	5,553	25,064
Net cash provided by (used in) investing activities	58,255	(323,684)
Net increase (decrease) in cash and cash equivalents	81,279	(444,867)
Cash and cash equivalents at the beginning of the month and year	262,502	788,648
Cash and cash equivalents at September 30, 2022	\$ 343,781	\$ 343,781
Cash and cash equivalents included in:		
Unrestricted cash and cash equivalents	\$ 248,035	\$ 248,035
Restricted and designated cash and cash equivalents	17,113	17,113
Restricted and designated assets (a component of the total of \$310,889 at September 30, 2022)	78,633	78,633
Cash and cash equivalents at September 30, 2022	\$ 343,781	\$ 343,781

SSS No. AQS 2022-8

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date

N/A

Board Meeting Date

November 17, 2022

TO					TO													
1.	Suresh Kotha				6.													
2.	Frankie McDermott				7.													
3.	Lora Anguay				8.													
4.					9.	Legal												
5.					10.	CEO & General Manager												
Consent Calendar		Yes	X	No If no, schedule a dry run presentation.		Budgeted	X	Yes	No (If no, explain in Cost/Budgeted section.)									
FROM (IPR) Claire Rogers				DEPARTMENT Audit and Quality Services				MAIL STOP ME-2	EXT. 7122	DATE SENT 11/4/22								
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:																
		<table border="1"> <thead> <tr> <th>Title</th> <th>Report Number</th> </tr> </thead> <tbody> <tr> <td>Status of Recommendations Report for Q3 2022.....</td> <td>n/a</td> </tr> <tr> <td>Workflow Integration</td> <td>28007465</td> </tr> <tr> <td>CAISO Settlement Quality Meter Data – SMUD</td> <td>28007562</td> </tr> <tr> <td>CAISO Settlement Quality Meter Data – CCA.....</td> <td>28007563</td> </tr> </tbody> </table>				Title	Report Number	Status of Recommendations Report for Q3 2022.....	n/a	Workflow Integration	28007465	CAISO Settlement Quality Meter Data – SMUD	28007562	CAISO Settlement Quality Meter Data – CCA.....	28007563			
Title	Report Number																	
Status of Recommendations Report for Q3 2022.....	n/a																	
Workflow Integration	28007465																	
CAISO Settlement Quality Meter Data – SMUD	28007562																	
CAISO Settlement Quality Meter Data – CCA.....	28007563																	
Board Policy:		Board-Staff Linkage BL-3, Board-Internal Auditor Relationship																
(Number & Title)																		
Benefits:		n/a																
Cost/Budgeted:		n/a																
Alternatives:		n/a																
Affected Parties:		Board, Internal Auditor																
Coordination:		n/a																
Presenter:		Claire Rogers, Director, Audit & Quality Services																
Additional Links																		

SUBJECT

Reports Issued by Audit and Quality Services

ITEM NO. (FOR LEGAL USE ONLY)

16

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: October 6, 2022

FROM: Claire Rogers

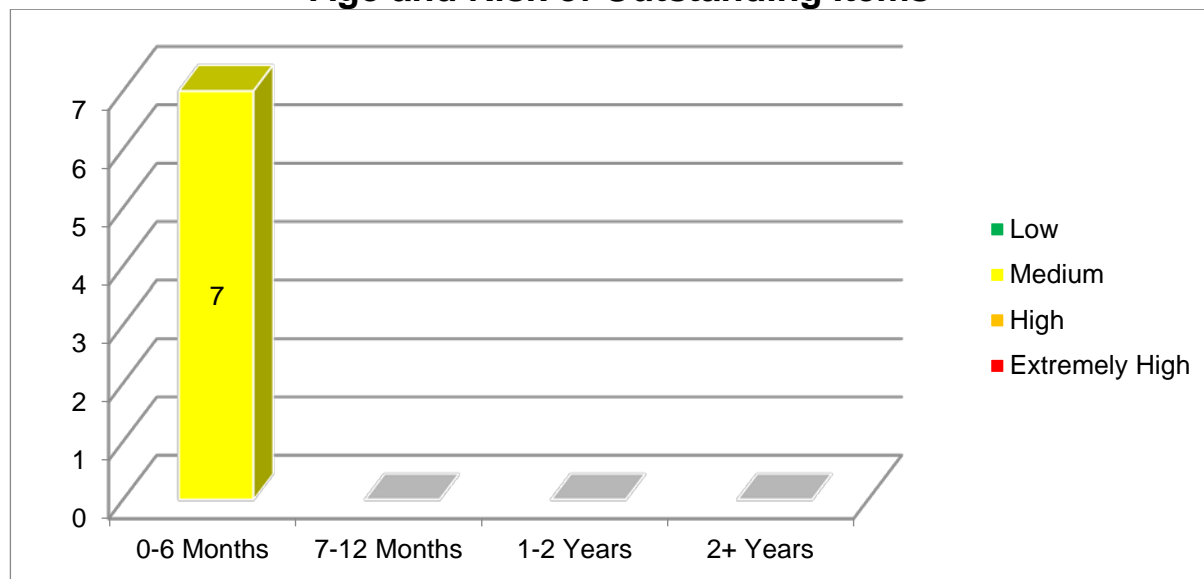
SUBJECT: QUARTERLY REPORT ON THE STATUS OF RECOMMENDATIONS AS OF SEPTEMBER 30, 2022

Attached for your review is the Status of Recommendations report for the Third Quarter of 2022. 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 September 30, 2022 regardless of their risk ranking.

None of the 7 open recommendations are currently overdue. The chart below is a breakdown by age and risk of the outstanding items regardless of their risk ranking:

Age and Risk of Outstanding Items



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.

STATUS OF RECOMMENDATIONS AT 09/30/2022

RISK	RECOMMENDATION	RESPONSIBLE DEPARTMENT	STATUS / DATE	COMMENTS
Data Sharing 2022 28007441-01 Medium Process Improvement	AQS recommends Data Governance enhance the data sharing process when sharing SCI with a third party to ensure that a security assessment of the third party's system/data repository is completed for data sharing requests that do not go through the procurement process.	IT Strategic Initiatives and Operations Technology	Date Issued 06/06/2022 Outstanding 10/31/2022	The Data Governance Program agrees with AQS's recommendation. Data Governance Program will mature the data sharing process by adding an additional workflow task to include the Information Security Team. They will have their own task to complete a security assessment. This will ensure that a security assessment can be completed on all data sharing request that requires SCI to be shared. It is anticipated that all corrective actions will be implemented by October 31, 2022.
Data Sharing 2022 28007441-02 Medium Process Improvement	AQS recommends Data Governance: <ul style="list-style-type: none"> a) Work with Cybersecurity to enhance MP 07.03.01.122, Data Sharing regarding staff's responsibility to obtain the data destruction letter from the third party for SCI data sharing requests as well as where the letter should be retained. b) Capture the actual data sharing end date for each data sharing request that involves sharing SCI with a third party. c) Develop a process to periodically monitor that SMUD staff have received the data destruction letter from the third party. 	IT Strategic Initiatives and Operations Technology	Date Issued 06/06/2022 Outstanding 10/31/2022	<ul style="list-style-type: none"> a. The Data Governance Program agrees with AQS's recommendation. Data Governance will partner with Cybersecurity to revamp the MP 07.03.01.122 to identify the responsible staff and their role to obtain the data destruction letter from the vendor for SCI data sharing request as well as where the letter should be stored. Data Governance will also work with responsible staff to develop a communication plan to notify Data Owners and Category Owners of the changes and address any questions they may have. b. The Data Governance Program agrees with AQS's recommendation. Data Governance will update the process to require a start and end date before closing the request in ServiceNow. c. The Data Governance Program agrees with AQS's recommendation. Data Governance will develop an annual process to ensure business areas have received a data destruction letter from the third party after the end date. In

STATUS OF RECOMMENDATIONS AT 09/30/2022

RISK	RECOMMENDATION	RESPONSIBLE DEPARTMENT	STATUS / DATE	COMMENTS
				<p>addition, we will work with all business area who own data and inform them about the new process and to get it implemented within their processes.</p> <p>It is anticipated that all corrective actions will be implemented by October 31, 2022.</p>
Data Sharing 2022 28007441-03 Medium Process Improvement	AQS recommends Data Governance develop a process to periodically assess the continued need of data sharing requests that involve sharing SCI with a third party with an ongoing data sharing period/no data sharing end date.	IT Strategic Initiatives and Operations Technology	Date Issued 06/06/2022 Outstanding 10/31/2022	The Data Governance Program agrees with AQS's recommendation. Data Governance will develop a process to track data share requests that have been listed as ongoing. A part of that process will be to use the ongoing requests that are being tracked to reach out to the business area to confirm that there is an ongoing business need to continue sharing the data. It is anticipated that all corrective actions will be implemented by October 31, 2022.
Data Sharing 2022 28007441-04 Medium Process Improvement	AQS recommends Data Governance document/clarify within ServiceNow as well MP 07.03.01.122 that for data sharing requests involving sharing SCI with a third party, the Directors' approval in ServiceNow includes an affirmation that the data sharing request is for primary business purposes unless otherwise specified within the data sharing request.	IT Strategic Initiatives and Operations Technology	Date Issued 06/06/2022 Outstanding 10/31/2022	The Data Governance Program agrees with AQS's recommendation. Data Governance will partner with the ServiceNow administrator to update the data sharing request submission screen to include the approvals that are required when SCI is involved. In addition, Data Governance will partner with Information Security to update MP 07.03.01.122 to document what approval is needed when SCI data is being requested to be shared. It is anticipated that all corrective actions will be implemented by October 31, 2022.
Data Sharing 2022 28007441-05	AQS recommends Cybersecurity update MP 07.01.01.100, MP 07.03.01.122 and the Data Sharing Process Reference Guide to ensure they are in alignment and reflect current processes.	Cybersecurity	Date Issued 06/06/2022 Outstanding 10/31/2022	Cybersecurity agrees with AQS' recommendation regarding Observation #5 – Data Sharing Procedures. Cybersecurity will ensure that the Data Sharing Process Reference Guide and SMUD policies addressing sensitive

STATUS OF RECOMMENDATIONS AT 09/30/2022

RISK	RECOMMENDATION	RESPONSIBLE DEPARTMENT	STATUS / DATE	COMMENTS
Medium				
Policies and Procedures				and confidential information and data sharing (currently MP 07.01.01.100-Sensitive and Confidential Information and MP 07.03.01.122-Data Sharing) are aligned with current processes, to include updates made as a result of the observations shared in this report. It is anticipated that all corrective actions will be implemented by October 31, 2022.

STATUS OF RECOMMENDATIONS AT 09/30/2022

RISK	RECOMMENDATION	RESPONSIBLE DEPARTMENT	STATUS / DATE	COMMENTS
Community Funding 28007323-01 Medium Process Improvement	Sustainable Communities should work with SMUD's Legal Counsel to revise the partnership agreement language to ensure that it more clearly describes the projects or programs being funded, when applicable, and so that it indicates the monetary value of the services being provided by the partner organization; additionally, any exceptions to the standard contract language should be reviewed by Legal. Sustainable Communities should also consider reviewing SMUD's Procurement Manual and working with Procurement staff to ensure all of the standard required elements of a valid contract are included in their partnership agreements.	Sustainable Communities	Date Issued 09/01/2022 Outstanding 04/28/2023	Sustainable Communities supports the general findings of observation 1 and recognizes the opportunity for process improvement to better clarify and demonstrate that the community partners are able to demonstrate completion of MOU terms. Sustainable Communities supports the agreement language revisions and will continue to work with SMUD's Legal Counsel to update the partnership agreement language to ensure that all parties clearly understand the projects or programs being funded, and better identify the monetary value of the services being provided by the partner organization. It is important to note that when evaluating services using equity metrics that similar service types in different geographic regions may offer varying monetary values based on need and desired outcomes. We will work to make sure that is qualified to the degree feasible. The Sustainable Communities team also agrees with the idea of reviewing the procurement manual for standard alignment and updating the audit language with our audit team, while continuing the existing MOU process outside of the formal procurement process to ensure adequate resource capacity.
Community Funding 28007323-02 Medium Process Improvement	Sustainable Communities should update its tracking documentation process to include all the tasks or deliverables associated with each agreement and addendums and indicate when they have been completed. Sustainable Communities should also consider referring to SMUD's Procurement Manual for contract monitoring guidance.	Sustainable Communities	Date Issued 09/01/2022 Outstanding 04/28/2023	The Sustainable Communities team manages over 135 multi-year partnerships with community organizations that are often understaffed. We agree that process improvements regarding the tracking and project management of the 135 partners would be of value to ensure that each partnership deliverable is being managed, tracked, and communicated. We support the recommendation and Sustainable Communities partnership specialists will update the Excel spreadsheet to include all the tasks and/or deliverables associated with each agreement

STATUS OF RECOMMENDATIONS AT 09/30/2022

RISK	RECOMMENDATION	RESPONSIBLE DEPARTMENT	STATUS / DATE	COMMENTS
				and addendum. Sustainable Communities will provide guidance to partners to ensure tasks and deliverables outlined in the agreement are reported out on in the quarterly reports. The Sustainable Communities team also agrees with the idea of reviewing the procurement manual for contract monitoring guidance. Again, technology (community portal) and aligned staffing resources (aligned skill sets for partner leads) will continue to help in the execution of this recommendation.

Work Flow Integration

Executive Summary

Audit and Quality Services (AQS) has completed a review of the Work Flow Integration process. The purpose of the audit was to evaluate the processes and controls in place to ensure that Avoidance and Minimization Measures (AMMs) are considered and implemented in electrical infrastructure projects. This audit was included in AQS's 2022 Audit Plan.

The Work Flow Integration (WFI) process was implemented in 2015 and allows for a review of certain projects by Environmental Services (ES) during their design phase. When a project is started, Line Design determines if the project is located in the Green Zone, which is an area with recorded environmentally sensitive resources. If all or a portion of the project is located in the Green Zone, an environmental hold will be placed on the project. ES will then determine whether any environmental impacts are likely and if AMMs need to be prescribed and implemented throughout the course of the project. This environmental review helps ensure that SMUD maintains compliance with state and federal environmental laws by prescribing AMMs to protect sensitive biological resources.

Based upon a sample of projects reviewed, AQS determined that projects located within environmentally sensitive areas are appropriately identified. Also, the majority of projects we reviewed indicated that work was conducted after ES completed their review. Lastly, there is currently a process in place to monitor compliance with AMMs for work that is conducted in higher risk areas that could have the potential to impact covered species.

AQS commends ES, Line Design, and Line Assets for their collaboration in adhering to the WFI process which helps streamline environmental reviews while protecting covered species from impacts to their habitat.

AQS would like to thank ES, Line Design, Line Assets, IT Applications, and IT Strategic Initiatives for their assistance and cooperation during the audit.

ERM Dashboard**Environmental Protection**

Audit & Quality Services

Work Flow Integration

Audit Report 28007465

Work Flow Integration

Audit & Quality Services Report

Background:

Audit and Quality Services (AQS) has completed a review of the Work Flow Integration process. The purpose of the audit was to evaluate the processes and controls in place to ensure that Avoidance and Minimization Measures (AMMs) are considered and implemented in electrical infrastructure projects. This audit was included in AQS's 2022 Audit Plan.

The Work Flow Integration (WFI) process was implemented in 2015 and allows for a review of certain projects by Environmental Services (ES) during their design phase. When a project is started, Line Design determines if the project is located in the Green Zone, which is an area with recorded environmentally sensitive resources. If all or a portion of the project is located in the Green Zone, an environmental hold will be placed on the project. ES will then determine whether any environmental impacts are likely and if AMMs need to be prescribed and implemented throughout the course of the project. This environmental review helps ensure that SMUD maintains compliance with state and federal environmental laws by prescribing AMMs to protect sensitive biological resources.

Once ES's review is complete, the environmental hold is removed. The project then continues on and reaches preconstruction status, where activities such as material delivery, field marking, and staking occur, and then to construction status when the crews are assigned and work begins.

Scope:

The scope of the audit included all order types that go through Line Design for projects that started after 12/31/2016, and associated documentation in SAP. Specifically, we reviewed orders that were completed or were in process but had reached the pre-construction phase between 1/1/2021 and 3/31/2022.

Objective:

The objective of the audit was to determine whether projects that take place within environmentally sensitive areas are appropriately identified and prescribed AMMs are being adhered to.

Summary:

AQS interviewed staff from ES, Line Design, Operations Scheduling and Productivity, and Line Construction, and reviewed relevant policies and procedures associated with the WFI process. To determine whether projects that take place within environmentally sensitive areas are appropriately identified, we reviewed a sample of 100 orders that did not have an environmental hold placed on them. We found that all of the projects except for one were correctly identified by Line Design as not being located in the Green Zone.

In addition, to determine if AMMs are being adhered to, AQS reviewed certain order types in SAP to verify whether work was conducted before ES completed their review and prescribed AMMs, if applicable. We found that out of 462 orders, most were either moved into preconstruction status after the environmental hold was removed or moved into construction status and a foreman assigned after the environmental hold was removed, indicating that work did not start until ES completed their review and determined whether any AMMs should be prescribed.

Finally, AQS found that ES currently has a process in place to monitor compliance with AMMs for work conducted in higher risk areas that could have the potential to impact covered species. In addition, ES provides mandatory training annually to field crews on the WFI process, including common AMMs prescribed, the consequences of not following them, and what to look for with the habitat of several special status species. SMUD is in the process of finalizing its Habitat Conservation Plan which will incorporate requirements to monitor the effectiveness of AMMs prescribed for work that impacts Endangered Species Act-covered species and to verify that the impact of covered activities is no greater than what was initially estimated in the plan.

Conclusion:

AQS found that projects that take place in environmentally sensitive areas are appropriately identified, and controls are in place to help ensure AMMs are being adhered to. AQS commends ES, Line Design, and Line Assets for collaborating and adhering to the WFI process, which helps streamline environmental reviews while protecting covered species from impacts to their habitat.

AQS would like to thank ES, Line Design, Line Assets, IT Applications, and IT Strategic Initiatives for their assistance and cooperation during the audit.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Office Memorandum

TO: Board of Directors

DATE: October 25, 2022
Audit Report # 28007562

FROM: Claire Rogers

SUBJECT: The California Independent System Operator (CAISO) Self-Audit of Settlement Quality Meter Data (SQMD) for Slab Creek Power House (a SMUD owned generation unit within the ISO Balancing Authority), SMUD's Energy Imbalance Market (EIM) Participating resources, and Balancing Authority of Northern California (BANC) EIM Load Resource

Audit and Quality Services (AQS) has performed a biennial self-audit as set forth in ISO Tariff Section 10.3.10.1 for Slab Creek Power House, SMUD EIM Participating Resources and BANC EIM Load Resource for the period beginning September 1, 2021 through August 31, 2022.

SMUD submits meter data to the ISO for one generating unit at Slab Creek which resides within the ISO region, 33 internal SMUD generators, 2 interties and one load resource as required for our participation in CAISO EIM.

AQS reviewed SMUD's data submittal and validation procedures for the Slab Creek and EIM participating meters. AQS also selected a sample of meter data during the audit period, and traced the meter data from the Market Results Interface – Settlements (MRI-S) system to SMUD's Energy Management System (EMS) and Itron Enterprise Edition (IEE), SMUD's meter data acquisition system.

Based on the procedures performed, AQS determined the procedures followed to report generation from Slab Creek were completed and accurately reported to the CAISO.

AQS did not audit all source data used to prepare this report. During the course of the audit, nothing came to the auditor's attention that would suggest the report did not fairly represent the source data available at the time of the review.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

Office Memorandum

TO: Board of Directors

DATE: October 25, 2022
Audit Report #28007563

FROM: Claire Rogers

SUBJECT: The California Independent System Operator (CAISO) Self-Audit of Settlement Quality Meter Data (SQMD) for Valley Clean Energy Alliance (VCEA) and East Bay Community Energy Authority (EBCE) (**Community Choice Aggregators**)

Audit and Quality Services (AQS) has performed a biennial self-audit as set forth in ISO Tariff Section 10.3.10.1 for Settlement Quality Meter Data for Valley Clean Energy Alliance (VCEA) and East Bay Community Energy Authority (EBCE), Community Choice Aggregators, for the period beginning September 1, 2021 through August 31, 2022.

SMUD receives meter data from PG&E, the Utility Distribution Company (UDC), aggregates the data, adjusts the data for distribution losses and submits Settlement Quality Meter Data to the CAISO for wholesale load settlement. Collection and validation of meter data received from the UDC is not included in this audit.

AQS reviewed the processes associated with the submission of SQMD data to the CAISO. AQS selected a sample of billing data, and traced data through the application of the load shape, application of the loss factor and the submittal to the CAISO. In addition, AQS reviewed and tested SQMD monitoring controls implemented by SMUD.

Based on the procedures performed, AQS determined the procedures followed to process meter data and submit Settlement Quality Meter Data to the CAISO were followed and that the total load billed is consistent with the total load settled for the days sampled.

AQS did not audit all source data used to prepare this report. During the course of the audit, nothing came to the auditor's attention that would suggest the report did not fairly represent the source data available at the time of the review.