

Board of Directors Meeting Agenda

Date: October 15, 2026

Time: 6:00 p.m.

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

Powering forward. Together.



•**AMENDED AGENDA**

•*Item 10 is removed.*

**SACRAMENTO MUNICIPAL UTILITY DISTRICT
BOARD OF DIRECTORS MEETING
SMUD HEADQUARTERS BUILDING
AUDITORIUM – 6201 S STREET
SACRAMENTO, CALIFORNIA**

October 15, 2026 – 6:00 p.m.

Virtual Viewing or Attendance:

Live video streams (view-only) and indexed archives of meetings are available at:

<https://www.smud.org/Corporate/About-us/Company-Information/Board-Meetings/Watch-or-Listen-online>

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

Webinar/Meeting ID: 165 930 5711

Passcode: 048600

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

Verbal Public Comment:

Members of the public may provide verbal public comment by:

- Completing a sign-up form at the table outside of the meeting room and giving it to SMUD Security.
- Using the “Raise Hand” feature in Zoom (or pressing *9 while dialed into the telephone/toll-free number) during the meeting at the time public comment is called. Microphones will be enabled for virtual or telephonic attendees when the commenter’s name is announced.

Written Public Comment:

Members of the public may provide written public comment on a specific agenda item or on items not on the agenda (general public comment) by submitting comments via email to PublicComment@smud.org or by mailing or bringing physical copies to the meeting. Email is not monitored during the meeting. Comments will not be read into the record but will be provided to the Board and placed into the record of the meeting if received within two hours after the meeting ends.

Call to Order.

a. Roll Call.

1. Approval of the Agenda.

2. Committee Chair Reports.

- a. Committee Chair report of October 6, 2026, Strategic Development Committee
- b. Committee Chair report of October 7, 2026, Policy Committee
- c. Committee Chair report of October 13, 2026, Finance & Audit Committee
- d. Committee Chair report of October 14, 2026, Energy Resources & Customer Services Committee

- **Items 5 through 7 were reviewed by the October 7, 2026, Policy Committee. Items 8 and 9 through 10 were reviewed by the October 13, 2026, Finance and Audit Committee. Item 11 was reviewed by the October 14, 2026, Energy Resources & Customer Services 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 No. 26-04-08) for the period of September 16, 2026, through October 15, 2026.
4. Approval of the minutes of the meeting of September 17, 2026.
5. Accept the monitoring report for **Strategic Direction SD-6, Safety Leadership**. Policy Committee 10/7. (Frankie McDermott)
6. Accept the monitoring report for **Strategic Direction SD-10, Innovation**. Policy Committee 10/7. (Joel Ledesma)
7. Accept the monitoring report for **Strategic Direction SD-19, Diversified Business**. Policy Committee 10/7. (Joel Ledesma)
8. Approve Contract Change No. 5 to Contract No. 4500146748 with **Andritz Hydro Corp** for the Camino Generator 1 Rehabilitation to increase the contract not-to-exceed amount by \$1,638,169, from \$12,323,835 to \$13,962,004. **Finance and Audit Committee 10/13.** (Joel Ledesma)
9. Authorize the Chief Executive Officer and General Manager to negotiate and award a contract to **International Business Machines Corporation (IBM)** for SAP S/4HANA Implementation Services for the period November 1, 2026, through December 31, 2029, for a not-to-exceed amount of \$32,189,635. **Finance and Audit Committee 10/13.** (Suresh Kotha)
- ~~10. Authorize the Chief Executive Officer and General Manager to negotiate and award a contract to **KPMG, LLP**, to provide Project Assurance/Quality Assurance Services for SAP S/4HANA Implementation during the period of November 1, 2026, through December 31, 2028, in an amount not to exceed \$6 million. **Finance and Audit Committee 10/13.** (Lora Anguay)~~

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Discussion Calendar:

11. Adopt the **California Environmental Quality Act (CEQA) Mitigated Negative Declaration (MND)** for the **Jackson Bulk Substation Project (Project)**; adopt the **Mitigation Monitoring and Reporting Program**; and approve the **Project**. Energy Resources & Customer Services Committee 10/14. (Frankie McDermott)

Presenter: Emily Bacchini

* * * * *

Public Comment:

12. Items not on the agenda.

Board and CEO Reports:

13. Directors' Reports.
14. President's Report.
15. CEO's Report.
a. Board Video

Summary of Board Direction

* * * * *

Board Committee Meetings and Special Meetings of the Board of Directors are held at the SMUD Headquarters Building, 6201 S Street, Sacramento

October 13, 2026	Finance and Audit Committee and Special SMUD Board of Directors Meeting	Auditorium*	6:00 p.m.
October 14, 2026	Energy Resources & Customer Services Committee and Special SMUD Board of Directors Meeting	Auditorium	6:00 p.m.
November 10, 2026	Strategic Development Committee and Special SMUD Board of Directors Meeting	Auditorium	6:00 p.m.
November 11, 2026	Policy Committee and Special SMUD Board of Directors Meeting	Auditorium	6:00 p.m.
November 17, 2026	Finance and Audit Committee and Special SMUD Board of Directors Meeting	Auditorium	6:00 p.m.
November 18, 2026	Energy Resources & Customer Services Committee and Special SMUD Board of Directors Meeting	Auditorium	6:00 p.m.

* * * * *

**The Auditorium is located in the lobby of the SMUD Headquarters Building, 6201 S Street, Sacramento, California.*

**Regular Meetings of the Board of Directors are held at the SMUD Headquarters Building,
6201 S Street, Sacramento**

November 19, 2026

Auditorium*

6:00 p.m.

**The Auditorium is located in the lobby of the SMUD Headquarters Building, 6201 S Street, Sacramento, California.*

Members of the public shall have up to three (3) minutes to provide public comment on items on the agenda or items not on the agenda, but within the jurisdiction of SMUD. The total time allotted to any individual speaker shall not exceed nine (9) minutes.

Members of the public wishing to inspect public documents related to agenda items may click on the Information Packet link for this meeting on the smud.org website or may call 1-916-732-6155 to arrange for inspection of the documents at the SMUD Headquarters Building, 6201 S Street, Sacramento, California.

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 meeting. If you need a reasonable auxiliary aid or service for effective communication to participate, please email Nicole.Looney@smud.org, or contact by phone at 1-916-732-6055, no later than 48 hours before this 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 No. 26-04-08) for the period of September 16, 2026, through October 15, 2026.

Sacramento, California

September 17, 2026

The Board of Directors of the Sacramento Municipal Utility District met in regular session simultaneously in the Auditorium of the SMUD Headquarters Building at 6201 S Street, Sacramento, and via virtual meeting (online) at 6:01 p.m.

Roll Call:

Presiding: President Tamayo

Present: Directors Rose, Fishman, Herber, and Sanborn

Absent: Directors Bui-Thompson and Kerth

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

Director Herber shared the 2030 Climate Action Tip.

President Tamayo called for approval of the agenda. Director Fishman moved for approval of the agenda, Director Herber seconded, and the agenda was approved by a vote of 5-0, with Directors Bui-Thompson and Kerth absent.

Director Sanborn, Chair, presented the report for the Strategic Development Committee meeting held on September 8, 2026.

Director Herber, Chair, presented the report for the Policy Committee meeting held on September 9, 2026.

Director Rose, Chair, presented the report for the Finance & Audit Committee meeting held on September 15, 2026.

Director Fishman, Vice Chair, presented the report for the Energy Resources & Customer Services Committee meeting held on September 16, 2026.

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

Sean Wirth, Conservation Chair for the Mother Lode Chapter of the Sierra Club, stated he had worked with staff on Consent Calendar Item 8 to improve the policies and principles and thanked Directors Tamayo, Herber and Sanborn for their leadership on the related ad hoc committee process. He requested the Board to approve Consent Calendar Item 8.

David Wright with 350 Sacramento thanked Directors Tamayo, Herber, and Sanborn for their work on the ad hoc committee. He then stated he would like the Board to withdraw Consent Calendar Item 8 in order to add language for a 30-day review period for power purchase agreements.

John Weber spoke to Consent Calendar Item 6. He stated that he felt it was good that staff brought the proposed grant forward for Board consideration but found it interesting that staff had applied for a \$122 million grant from the Department of Energy for a new large load customer. He stated he thought the Board should have voted on that grant before it was submitted.

President Tamayo then addressed the Consent Calendar consisting of Items 3 through 11. Director Fishman moved for approval of the Consent Calendar, Director Rose seconded, and Resolution Nos. 26-09-01 through 26-09-07 were approved by a vote of 5-0, with Directors Bui-Thompson and Kerth absent.

RESOLUTION NO. 26-09-01

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

That this Board hereby approves Board member compensation for service rendered at the request of the Board (pursuant to Resolution No. 26-04-08) for the period of August 16, 2026, through September 15, 2026.

Approved: September 17, 2026

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

RESOLUTION NO. 26-09-02

WHEREAS, this Board has adopted diversified business and environmental leadership policies; and

WHEREAS, the **California Strategic Growth Council (CSGC)** **Transformative Climate Communities (TCC) Program** funds frontline communities' projects to reduce greenhouse gas emissions and local air pollution; and

WHEREAS, funding for **Round 6** of **TCC Program** grants is available for projects that reduce greenhouse gas (GHG) emissions through the development and implementation of neighborhood-level transformative climate community plans; and

WHEREAS, in support of SMUD's policies, SMUD plans to submit a **Round 6** application to **CSGC** for the **TCC Grant (Grant)** due on September 30, 2026; and

WHEREAS, SMUD currently has planned and budgeted projects for urban greening and residential electrification for low-income customers; and

WHEREAS, the potential funds acquired from the **Grant** will also support funding for community-based organizations with whom SMUD has partnered to execute robust sustainable, workforce, economic, housing, health, and transportation projects; and

WHEREAS, the **Grant** provides funding that, if awarded, SMUD would use to offset the costs of these planned projects; and

WHEREAS, the total project **Grant** award being sought is \$27.5 million, with a required 50% cost share to be fulfilled by contributions from SMUD and its multiple project partners; **NOW, THEREFORE**,

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

Section 1. This Board authorizes the submittal of SMUD's **Round 6** grant application to the **California Strategic Growth Council** for the **Transformative Climate Communities (TCC) Grant (Grant)**, covering projects including urban greening and residential electrification for low-income customers,

and support for partner organization projects, with a cost-share not to exceed 50% of the **Grant** funding awarded.

Section 2. The Chief Executive Officer and General Manager, or her designee, is authorized to negotiate and execute in the name of Sacramento Municipal Utility District a **California Strategic Growth Council TCC Grant** recipient contract as well as all **Grant** documents, including, but not limited to, applications, agreements, amendments and requests for payment, necessary to facilitate **Grant** participation and related community partnerships, with terms in the best interest of SMUD.

Section 3. The authorizations for the Chief Executive Officer and General Manager, or her designee, under Section 2. are effective from the date of adoption of this resolution through December 31, 2031.

Approved: September 17, 2026

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

RESOLUTION NO. 26-09-03

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

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

Approved: September 17, 2026

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

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: August 26, 2026

FROM: Linda Wong *LW 8/26/26*

SUBJECT: Audit Report No. 28008032
Board Monitoring Report; SD-7: Environmental Leadership

Internal Audit Services (IAS) received the SD-7 *Environmental Leadership* 2025 Annual Board Monitoring Report and performed the following:

- Selected a sample of statements and assertions in the report for review.
- Compared sample to the corresponding supporting documentation to identify potential discrepancies.

All items sampled within the SD Report aligns with the supporting documentation provided at the time of review.

CC:

Lora Anguay

Board Monitoring Report 2025

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, including Tribal and other cultural impacts, conserving resources, enhancing regional biodiversity 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 demonstrates our commitment to environmental leadership in our 2030 Clean Energy Vision and Zero Carbon Plan along with the transparent reporting of greenhouse gas (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 2025 that showcases our commitment to environmental leadership.

We are compliant with the five tenets of SD-7. Our efforts are highlighted in the supporting information below and Appendices: Appendix A (2015-2025 SMUD GHG Emissions Trends), Appendix B (Sustainable Communities Deliverables and Accomplishments To-Date), and Appendix C (List of Acronyms).

3. Supporting Information

2030 Clean Energy Vision and Zero Carbon Plan

SMUD is making strong, measurable progress toward its 2030 carbon-free power goal through a balanced strategy that includes both direct project development and Power Purchase Agreements (PPAs) that expand our access to clean, reliable energy. On the development side, major local and regional projects are advancing through permitting, design, and construction, including Country Acres in Placer County, where construction is underway on a 344 megawatt (MW) solar and 172 MW battery storage project expected online in 2027; Oveja Ranch in Sacramento County, where environmental review was completed for a 75 MW solar and 37.5 MW four-hour battery storage project; and two projects currently in the environmental review process including Curry Creek, which will add 156 MW of solar and 156 MW of four-hour battery storage and Solano 5, a wind repowering effort in Solano County that will modernize existing infrastructure and increase annual energy production by approximately 80%.

At the same time, SMUD is expanding its carbon-free portfolio through strategic PPAs that bring in new renewable generation from across California and the West, including the 50 MW Sloughhouse solar project, a local solar installation that became operational in June 2025; 70 MW Grace solar project in Riverside County; 101.2 MW of wind energy from Hatchet Ridge in Shasta County; 150 MW of wind energy from the Sunzia project in New Mexico; and 46 MW of solar energy from the Terra-Gen project in Kern County. Together, these efforts represent significant additions of solar, wind, and

battery storage capacity and greenhouse gas (GHG) reductions. This mix of renewable resources demonstrates SMUD's momentum in building a more diverse, reliable, and carbon-free energy portfolio to serve customers and meet its 2030 goal.

Greenhouse Gas Emissions

For 2025, GHG emissions were approximately 1.477 million metric tons carbon dioxide equivalent (CO₂e)¹. This is a decrease of 215 thousand metric tons from 2024 emissions; a graph presenting the trend going back to 2015 (which was an especially severe drought year) can be found in Appendix A. Fluctuations in total emissions year-to-year are primarily attributable to hydroelectricity production, increases and decreases to customer demand, and the availability of ACS (Asset Controlling Supplier) low carbon power. As we continue to purchase greater quantities of zero and lower emissions-intensity power, we expect emissions to meet customer demand to decrease. A breakdown of emissions by thermal power plant, and power purchases, with comparisons between 2024 and 2025 can be found in Appendix A.

TCR Climate Registered Platinum Status

For the sixth year in a row, SMUD was recognized by The Climate Registry (TCR), a non-profit organization which designs and operates voluntary and compliance GHG reporting programs. This past year, SMUD was recognized as a Climate Registered Accelerator™ Hero.

Invasive Mussel Monitoring and Mitigation

In early 2025, golden mussels were found in the lower San Joaquin River and upper Sacramento–San Joaquin Delta region greatly increasing the threat of introduction of invasive freshwater mussels into SMUD-owned or contracted reservoirs and water supplies. We promptly began implementing a robust mussel monitoring and inspection program at Rancho Seco Lake and increased monitoring efforts in the Upper American River Project. We received a grant for \$91,161 from California Department of Fish & Wildlife to enhance preparedness and response efforts against invasive golden mussels and their growing threat in lakes, reservoirs and waterways in the region. The funds allowed SMUD to purchase a solar and battery-powered boat cleaning system to clean and prevent introduction of golden mussels at Rancho Seco Lake.

Promote Efficient Use of Energy by Our Customers

Our building electrification and energy efficiency programs proactively support residential and commercial customers across the region by leading outreach to achieve carbon savings. Made possible by hundreds of homeowners attending our quarterly energy education courses and hundreds of trusted contractors in the SMUD Contractor Network joining weekly office hours and monthly webinars, our Advanced Home Solutions (AHS) program has supported over 25,000 heat pump installations for space and water heating since 2018, including 4,994 in 2025. These trainings and meetings help customers and contractors learn the benefits of all-electric heat pumps, electrification, and energy efficiency.

Last year, we increased participation even more with targeted email campaigns, bill inserts, and digital advertising as part of our Go Electric campaign. These efforts helped us reach more customers with the benefits of energy-efficient upgrades. We also launched Xerohome, an easy online tool that lets customers clearly see how electrification can save energy and lower bills. In an effort to leave no business behind in our clean energy future, commercial teams outreached five property business improvement districts in the underserved parts of Sacramento. Outreach was performed in the Arden/Howe district, River district, Mack Road district, Franklin Boulevard district, and the Gardenland/Northgate Neighborhood Association district. These efforts brought equitable outcomes for reaching diverse communities of cultural varieties where SMUD was able to assess more than 200 small to mid-sized businesses as part of these efforts.

¹ The 2025 GHG emissions value represents emissions associated with meeting our SMUD customers' energy demand and does not include emissions associated with wholesale energy sales into the market. The 2025 emissions from the net wholesale power are approximately 0.934 million metric tons of carbon dioxide (CO₂). The net wholesale power is the difference between the unspecified power purchased and the power sold into the market.

Partnering with the Gardenland/Northgate Neighborhood Association brought support from the Hispanic Chamber of Commerce who had received federal American Rescue Plan Act funds to support business effected by the pandemic. SMUD developed Spanish materials and agreements to engage 100% of the members of the Hispanic Chamber to utilize the funding available to them. In total SMUD will be reimbursed \$1,374,912 dollars for commercial customers in this district to receive energy efficiency and electrification upgrades that achieve economic and environmental benefits.

The SD-9 report provides an update on progress towards our energy efficiency and building electrification goals in 2025.

Transportation Electrification

SMUD's transportation electrification portfolio includes residential electric vehicle (EV) charger incentives, residential outreach, and commercial charger incentives. Our goal is to have our vehicle electrification programs reduce transportation GHG emissions by 1,000,000 MT CO₂e in 2030, the equivalent of electrifying 288,000 vehicles. In 2025, our residential and commercial transportation electrification programs continued to support the adoption of transportation electrification throughout our service territory, with particular attention to under-resourced communities.

We continued to support the Clean Cars for All (CC4A) program in partnership with Sacramento Metropolitan Air Quality Management District (SMAQMD). SMAQMD's program provides up to \$12,000 toward a new or used plug-in hybrid electric vehicle (PHEV) for income-qualified residents living in areas impacted by higher levels of pollution. We provided additional support for customers participating in CC4A and installed 86 EV chargers. Additionally, we installed 180 EV chargers and 344 EV circuits for income-qualified customers to equip their homes for charging a future EV.

Building Resilient Communities Through Partnership

In 2025, SMUD invested \$4,631,189 in our Sustainable Communities community-based partnerships and programs, supporting an inclusive clean energy future for all customers in our service territory. By aligning our Sustainable Communities efforts with the 2030 Zero Carbon Plan, we're ensuring that all communities in Sacramento share the benefits of the clean energy transition, including health benefits from improved air quality, new jobs and resilience to climate change (Appendix B). Notable 2025 partnerships include:

- **Helping our Community Shine** – The Shine Awards program invests in local collaborations and partnerships supporting our historically under-resourced nonprofit partners that execute inclusive and equitable projects through communities. In 2025, 98 organizations submitted applications and 22 projects totaling \$534,728.62 were awarded.
- **Securing Infrastructure while Supporting our Community** – SMUD partnered with Volunteers of America (VOA) to provide services to the unhoused population around our infrastructure sites. Often, crews will find unhoused campers in unsafe situations. Now, instead of calling security, the partnership, that was renewed for an additional year in 2025, resulted in a VOA social worker connecting with 200 individuals experiencing homelessness and connected them to general services, clothing, and hygiene supplies. The VOA response team also educates the individuals about safety.
- **Electrifying Meadowview** – In 2025, SMUD continued a partnership with Congresswoman Doris Matsui and local community organizations to expand neighborhood electrification in Meadowview. The project improved indoor air quality, lowered utility bills, reduced financial burden of aging appliances, and increased access to clean energy technologies while creating workforce development opportunities and engaging customers on the benefits of electrification. Building SMUD's longstanding work in residential energy efficiency, the Meadowview Neighborhood Electrification Project exceeded its original goal of 300 by retrofitting 372 homes. Partnerships with community leaders, school districts, faith-based organizations, neighborhood associations, and other local organizations were instrumental to the project's success. The Congressionally Directed Spend (CDS) grant concluded on September 30, 2025.

Partnering with our Local Tribes

SMUD continues to partner with American River College's Native American Resource Center (NARC) to support Native students and strengthen relationships with local Tribes. As a major sponsor of the American Indian Summer Institute (AISI), SMUD provides funding and employee engagement opportunities, including hands on demonstrations for the students at the East Campus Operations Center led by staff from Distribution System Operations, Warehouse Operations, Network, Substations, and Line Division. SMUD also helped establish the Elder-in-Residence program which provides opportunities for Tribal elders to share traditional cultural practices and ecological knowledge with students. These partnerships, which grew from AB52 Tribal consultation for the Station H project, reflect SMUD's ongoing commitment to meaningful collaboration with Tribal communities. In 2025, staff consulted with at least one Tribe on every California Environmental Quality Act (CEQA) project including Station J Substation, Solano 5 Wind Repower, Oveja Ranch Solar, Curry Creek Solar, and the Folsom Administrative Office Building.

Sacramento Tree Foundation Sacramento Shade Program

In 2025, the Sacramento Tree Foundation distributed 11,203 shade trees as part of its Sacramento Shade program serving 2,695 customers with an average of 5 trees delivered per customer. A total of 4,164 trees (37.2%) were planted in under-resourced communities. The total carbon (stored in biomass and avoided) for these trees is estimated at 34,044.10 metric tons. In the Fall of 2025, we began a pilot to add native shrubs to the Shade Tree Program. The native shrubs are an opportunity to engage residents in multi-family units with limited space and renters who cannot plant trees. Sourcing from a local vendor, Cornflower Farms, the program successfully provided 50 shrubs at the end of 2025.

Environmental Review and Habitat Conservation Plan Initiatives

In 2025, the Environmental Services team reviewed a total of 389 projects located in areas with potential sensitive biological resources, naturally occurring asbestos, or soil management considerations. Avoidance and minimization measures or mitigation was prescribed for 47% of projects with potential to impact sensitive biological resources. All projects with potential for naturally occurring asbestos or contaminated soil were evaluated and best management practices were implemented to ensure the safety of field staff and contractors. Additionally, 2025 marked the inaugural year of SMUD's Habitat Conservation Plan (HCP). SMUD performed 35 projects using the streamlined permit program that prioritized species protection. Throughout this process, project impacts were minimized and mitigated in accordance with the conditions of the HCP, reinforcing our commitment to responsible environmental stewardship.

Biodiversity & Habitat Conservation Working Group Initiatives

SMUD's internal Biodiversity & Habitat Conservation working group remained active throughout 2025 with members coordinating on initiatives to support enhanced regional biodiversity. Our Pine Hill Preserve restoration project, a partnership with state and federal agencies, Sacramento State, and multiple SMUD departments, won the 2025 North American Pollinator Protection Campaign's Electric Power Award for its right of way management practices supporting rare and endemic plant species in addition to pollinators and wildlife. We tripled the volume of locally native seed packets purchased for distribution at SMUD community events held in the spring and fall. We launched a first-of-its-kind Nature-Based Carbon Solutions & Biodiversity feasibility study to understand the potential for land-based carbon storage with co-benefits to local ecosystems associated with land that SMUD owns or manages. SMUD joined the regional Power in Nature initiative, a collaborative effort to support the state's 30x30 program.

Avian Protection

In 2025, as part of SMUD's Avian Protection Program, upgrades were made on 53 poles aimed at making overhead facilities safer for birds and more reliable for our customers. Avian mitigation projects included installation of avian protection guards, flight diverters, and pole reframing. Additionally, three nest platforms were installed on wood poles along Garden Highway to facilitate the relocation of osprey nests to protect the birds, increase system reliability, and support local osprey populations.

Equipment Electrification

SMUD has been replacing its gas/diesel-powered equipment with equivalent electric/battery powered tools where they are available from the market, such as chain saws, trimmers, blowers, and generators. By researching market availability and capitalizing on technological improvements, we achieved 98% hand tool electrification in 2025.

SMUD is also focused on reducing emissions generated by our fleet. This is being accomplished through alternative fuel usage, idle reduction and vehicle electrification where the technology is available. Since 2016, SMUD has measured:

- GHG emissions reduction through transportation electrification, increasing from 1.0 MTCO_{2e} in 2016 to a reduction of 99.0 MTCO_{2e} in 2025.
- Electric vehicle miles driven have increased from 2,462 in 2016 to 358,635 in 2025.
- Total emissions generated from combustion of fossil fuels by the Fleet have also been reduced from 5,553 MTCO_{2e} in 2016 to 3,677 MTCO_{2e} in 2025.
- Fuel Economy increased from 7.48 miles per gallon (MPG) in 2016 to 8.76 MPG in 2025.

Investment Recovery and Sustainable Solutions

The Warehouse team had a remarkable year with the Investment Recovery and Sustainable Solutions (IR&SS) program resulting in extra income, cost savings and less waste sent to landfills. In 2025 the IR&SS program generated \$1.1 million from recycled metals and diverted 957 tons from the landfill. This effort also helped avoid approximately 5,200 MTCO_{2e} by recycling instead of producing metals from raw materials. Warehouse Material Specialists saved over \$2 million by implementing a circular economy model (redeploy, reuse, repurpose, recycle). We reused 388 wood reels and respooled 74 of those with wire. Additionally, 2,245 wood pallets were recycled or reused instead of going to the landfill.

SMUD contracted with Transformer Technologies, a company that specializes in the decommissioning, dismantling, and recycling of electrical equipment for utilities. This recycling effort not only reduces waste but also supports SMUD's sustainability initiatives by efficiently recycling materials such as copper, aluminum, and oil. In the current market, SMUD receives credit for metal recycling. In 2025, we removed and recycled eight transformers from substations, totaling \$372,730 in credit, and diverted a total of 780,410 pounds of metal from landfills.

4. Challenges

In 2025, The primary challenges to achieving the SD-7 goals centered on advancing SMUD's Zero Carbon initiatives while balancing costs, reliability, and environmental stewardship. As SMUD continued to develop renewable energy projects, procure clean energy resources, and modernize the electric grid to support building electrification, electric vehicles, and regional growth, projects encountered increasingly complex regulatory requirements, land use constraints, sensitive biological and cultural resources, permitting challenges, and rising development costs. Addressing these challenges required innovative planning, early coordination with Tribes, agencies, landowners, and local communities, and thoughtful project design to minimize environmental impacts while delivering power and the infrastructure needed to support SMUD's clean energy vision.

5. Recommendation

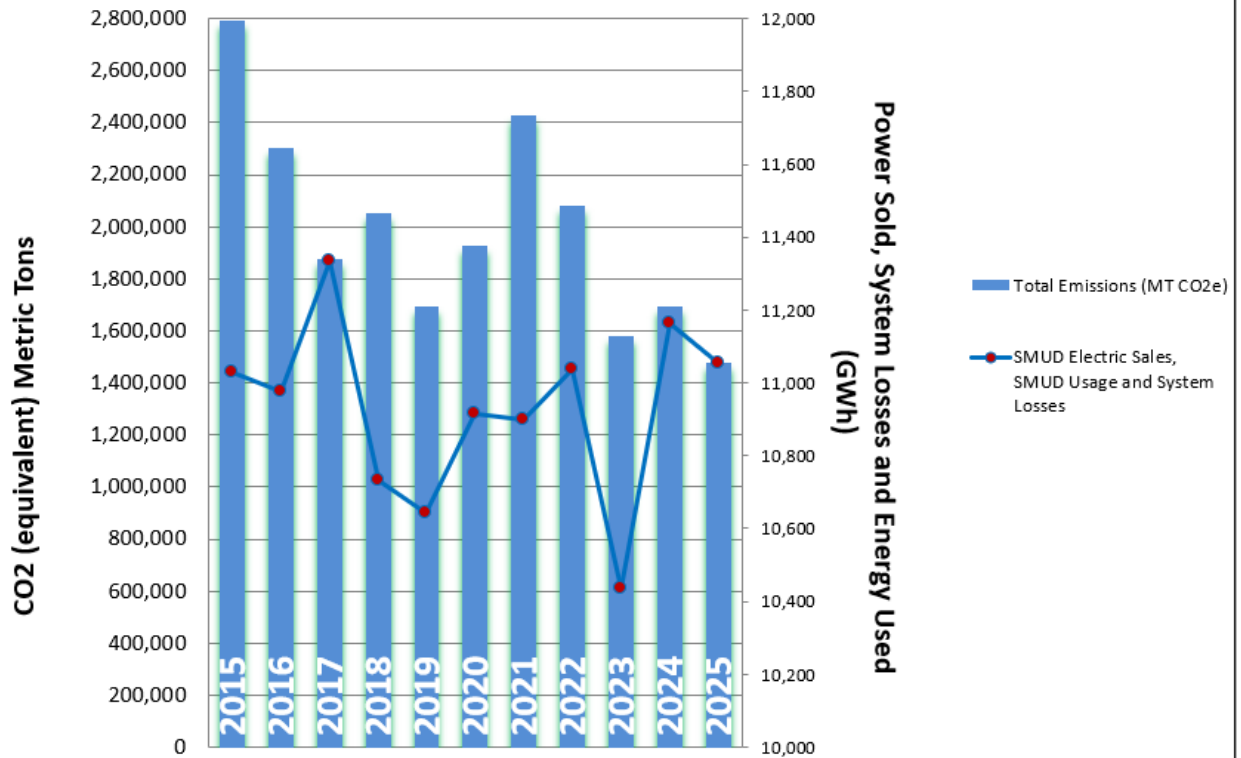
It is recommended that the Board accept the Monitoring Report for SD-7, Environmental Leadership.

6. Appendices

- A. 2015-2025 SMUD Greenhouse Gas Emissions Trends
- B. Sustainable Communities Deliverables and Accomplishments To-Date
- C. List of Acronyms

Appendix A²

2015-2025 SMUD Greenhouse Gas Emissions Trends



Total emissions and SMUD electric sales are net of wholesale emissions and wholesale power sales, respectively.

* Starting with the 2024 emissions data, SMUD changed from an annual emissions accounting method to an hourly emissions accounting method that aligns with the requirements under Senate Bill 1158.

Thermal Power Plant Greenhouse Gas Emissions

Source	2024 MMT CO ₂ e	2025 MMT CO ₂ e	Percent Change
Thermal Emissions less any Cogen Sales			
Cosumnes	1,466	1,345	-8%
Proctor & Gamble	267	231	-13%
Campbell	301	253	-16%
Carson	48	44	-9%
McClellan	2.3	0.8	-64%
Specified Power Purchases	490	537	10%
Net Wholesale Adjustment	(882)	(934)	-6%
Total	1,692	1,477	-13%

² SD7 reports emissions to meet customer demand net of wholesale market transactions, while SD9 provides an explanation of events that materially increased or decreased our emissions from what was forecast.

Appendix B

Sustainable Communities Deliverables and Accomplishments To-Date

Strengthening our neighborhoods. Together.



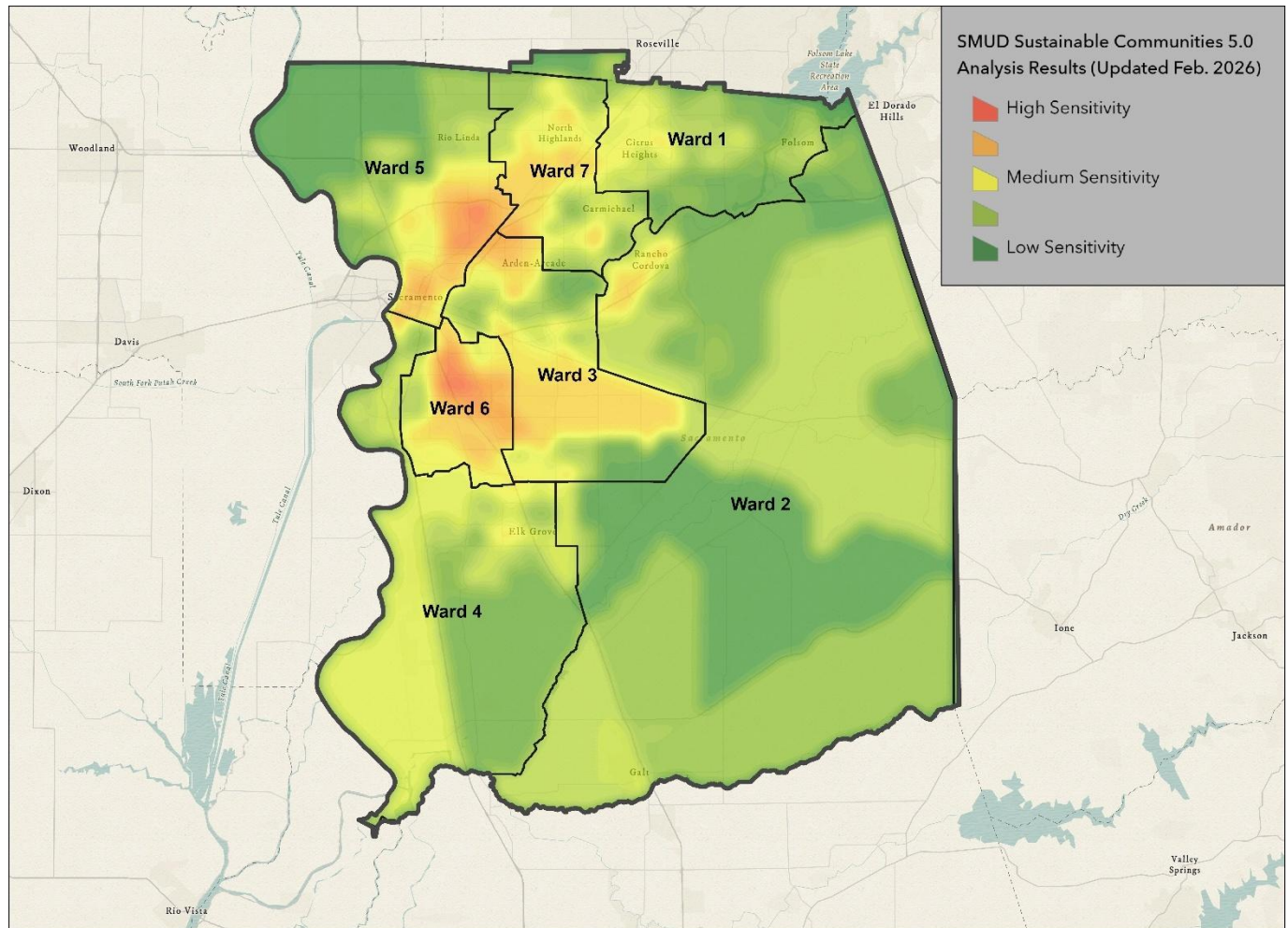
smud.org/SustainableCommunities



Through our Sustainable Communities program, SMUD partners with our community to deliver innovative energy solutions that strengthen the local Sacramento economy and improve quality of life for our customers. Through targeted investments in community-based organizations, we work to keep energy affordable, enhance community resiliency, and ensure neighborhoods are prepared to adapt to changing energy needs and environmental conditions.

Our Sustainable Communities efforts focus on building a skilled zero carbon workforce, expanding access to energy and Science, Technology, Engineering, and Mathematics (STEM) education, and supporting economic development across the region. By aligning resources with community priorities, we help create opportunities for innovation, job growth, and long-term stability for the customers and communities we serve.

Sustainable Communities Resource Priorities Map



SMUD's Sustainable Communities Resource Priorities Map analyzes current data to identify the local areas most likely to be under-resourced or in distress due to lack of community development, income, housing, employment opportunities, transportation, medical treatment, nutrition, education, and clean environment. The map and underlying source data support a data driven approach to identifying and targeting communities with greater sensitivity to social, economic, and environmental vulnerabilities. SMUD is continuing to assess how various energy programs and projects can be enhanced or expanded to improve equity, incorporating what community members themselves feel is needed to achieve a more equitable energy future.

Appendix C

List of Acronyms

AHS	Advanced Home Solutions
AISI	American Indian Summer Institute
ACS	Asset Controlling Supplier
CEQA	California Environmental Quality Act
CO₂	Carbon Dioxide
CO₂e	Carbon Dioxide Equivalent
CC4A	Clean Cars for All
CDS	Congressionally Directed Spend
EPRI	Electric Power Research Institute
EV	Electric Vehicle
GHG	Greenhouse Gas
HCP	Habitat Conservation Plan
IR&SS	Investment Recovery and Sustainable Solutions
MW	Megawatt
MMT	Million Metric Tons
NARC	Native American Resource Center
PHEV	plug-in hybrid electric vehicle
PCB	Polychlorinated Biphenyls
PPAs	Power Purchase Agreements
SD	Strategic Direction
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utility District
STEM	Science, Technology, Engineering, and Mathematics
TCR	The Climate Registry
VOA	Volunteers of America
ZCP	Zero Carbon Plan

RESOLUTION NO. 26-09-04

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

This Board approves the revisions to the **Strategic Direction SD-7, Environmental Leadership**, substantially in the form as set forth in **Attachment B.**

Approved: September 17, 2026

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

SMUD BOARD POLICY



Category: Strategic Direction
Policy No.: SD-7
Title: Environmental Leadership

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, including Tribal and other cultural impacts, conserving resources, enhancing regional biodiversity 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.
- f) Address SMUD’s Principles for Renewable Energy Procurement and Development (PREPD).

Monitoring Method: CEO Report

Frequency: Annual

Versioning:

August 21, 2003	Resolution No. 03-08-13	Date of Adoption.
October 16, 2003	Resolution No. 03-10-14	Date of Revision.
July 21, 2005	Resolution No. 05-07-10	Date of Revision.
December 18, 2008	Resolution No. 08-12-14	Date of Revision.
April 15, 2021	Resolution No. 21-04-04	Date of Revision.
September 21, 2023	Resolution No. 23-09-02	Date of Revision.
November 16, 2023	Resolution No. 23-11-07	Date of Revision.
October 17, 2024	Resolution No. 24-10-02	Date of Revision.
September 17, 2026	Resolution No. 26-09-04	Date of Revision. [Current Policy]

RESOLUTION NO. 26-09-05

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

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

Approved: September 17, 2026

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

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: August 26, 2026

FROM: Linda Wong *LW 8/26/26*

SUBJECT: Audit Report No. 28008033
Board Monitoring Report; SD-9: Resource Planning

Internal Audit Services (IAS) received the SD-9 *Resource Planning* 2025 Annual Board Monitoring Report and performed the following:

- Selected a sample of statements and assertions in the report for review.
- Compared sample to the corresponding supporting documentation to identify potential discrepancies.

All items sampled within the SD Report aligns with the supporting documentation provided at the time of review.

CC:

Lora Anguay

Board Monitoring Report 2025

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, including Tribal and other cultural impacts, 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:

- 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).
- 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.
- In meeting GHG reduction goals, SMUD shall:
 - Emphasize local and regional benefits.
 - Improve equity for under-served communities.
- Explore, develop, and demonstrate emerging GHG-free technologies and business models.
- Promote cost effective, clean distributed generation through SMUD programs.

2. Executive Summary

SMUD made progress towards each Strategic Direction 9 (SD-9) goal in 2025. We added 151 MW of solar and wind to our energy supply, supported a 23% increase in all-electric buildings and a 23% increase in electric vehicles (EVs), and stayed on track to meet the state's renewable resources mandate for the 2025-2027 compliance period. We implemented programs focused on local benefits and under-served communities, pursued GHG-free technologies including carbon capture and storage, and supported the addition of 53 MW of customer solar and storage. Our GHG emissions to meet customer electricity needs **were 1,477 thousand metric tons (MT) of greenhouse gas (GHG)** in 2025. This emissions result reflects several factors that SMUD cannot control for, including divergence between planned and actual wind and hydro generation and

customer load during the year. Adjusting for these factors, SMUD's emissions would have been about 1,340 thousand MT GHG.

3. Additional Supporting Information

SD-9 sets various sustainable power supply goals for our integrated resource plan (IRP) as well as for our customer programs. Our IRP process informs long-term strategic development of programs and generation resources, balancing reliability, sustainability, environmental, financial, and customer benefits while achieving SD-9 goals. In 2021, the Board adopted the 2030 Zero Carbon Plan (ZCP) and revised our SD-9 targets in line with the plan. Subsequently in 2022, the Board formally adopted the ZCP as our IRP and filed it with the CEC. For a detailed history of SD-9, see Appendix A. The ZCP is our roadmap to eliminate GHG emissions from our electricity supply by 2030. Our progress related to SD-9 goals and implementation of our ZCP is detailed in this report.

A. Greenhouse Gas Emissions

GHG emissions associated with meeting customer electricity needs were 1,477 thousand MT GHG (Table 1). GHG emissions adjusted for the divergence between planned and actual wind, hydro, and customer load conditions were 1,340 thousand MT GHG. See Appendix B for more details on SMUD's adjusted emissions and how they are calculated.

Table 1: SD-9 GHG Emissions & Near-term Targets

Source	Net Power (GWh)	GHG Emissions (Thousand MT GHG)
Net generation and specified power purchases	13,476	2,411
Net wholesale market transactions (un-specified purchases less sales)	-2,423	-934
GHG emissions to meet customer load (SD-7 emissions)	11,053	1,477
Load variability adjustment		-2
Hydro variability adjustment		-53
Wind variability adjustment		-82
Adjusted emissions (SD-9 emissions)		1,340
2030 Target		0

B. Energy Efficiency and Electrification

SMUD's energy efficiency and building electrification goals are supported by rebates and retailer incentives for residential and commercial customers for new construction and retrofit programs. Meanwhile, SMUD's transportation electrification programs provide broad support to both residential and business customers interested in adopting electric vehicles and charging. SMUD's transportation electrification portfolio includes residential and commercial electric vehicle (EV) charger incentives and residential outreach. Table 2 shows the progress made by these programs in 2025.

Table 2: Energy Efficiency and Electrification Progress in SMUD Territory

SMUD Portfolio	2025 Additions	Cumulative Total	2025 Emission Reduction from Cumulative Total (MT GHG)
Building Electrification & Energy Efficiency	5,152 all-electric homes equivalent ¹	27,114 all-electric homes equivalent	153,318
Transportation Electrification	14,543 EVs registered	76,521 EVs registered	244,867 ²

C. Renewable and Zero Carbon Energy Resources

We continue advancing our renewable resource portfolio to meet state RPS requirements and ZCP objectives. See below for the status on these efforts.

California Renewables Portfolio Standard (RPS)

Although our goals are more ambitious than already aggressive state mandates, we continued to implement a renewable energy strategy that meets state RPS requirements. Leveraging existing and new RPS eligible renewable generation, we acquired sufficient resources to achieve our RPS compliance obligation for the 2021-2024 compliance period and have sufficient resources under contract to meet the 2025-2027 compliance period requirements. For a detailed discussion of our RPS compliance obligation, see Appendix B.

Zero Carbon Resource Progress and Development

To meet our environmental goals, we continued to pursue zero carbon technologies such as wind, geothermal, solar, energy storage, and clean emerging technologies such as carbon capture and sequestration, and long duration energy storage. In 2025, we added 151 MW of wind and solar to our portfolio and completed a retooling project on our Cosumnes thermal power plant, resulting in an approximate annual portfolio emission reduction of 261 thousand MT GHG. Since adopting the ZCP in 2021 and through 2025, we have added 441 MW of zero carbon resources to our portfolio. We have an additional 992 MW of zero carbon resource under power purchase agreements due online between 2026-2030, and another 2,000 MW of clean resources under various stages of evaluation. See Table 4 in Appendix C for more details. Beyond the projects identified in this report, we are continuously reviewing and pursuing additional zero carbon resource opportunities.

Voluntary Renewable Energy Programs

In alignment with the ZCP, SMUD continued to expand our customer options for voluntary renewable programs through the Greenenergy and SolarShares programs. In 2025, these programs delivered a total of 807 GWh of renewable energy to participating customers, representing 8% of gross retail sales. Greenenergy accounted for 478 GWh, or 59% of total Green Pricing sales, and has resumed growth following a period of stabilization, driven by increased customer interest and new project offerings.

¹ All-electric homes equivalent is defined as the sum of all fully electrified homes, as well as the all-electric home contribution of individually electrified HVAC systems, heat pump water heaters, and stoves across different homes in SMUD's service territory.

² One EV is equivalent to 3.2 MT of GHG reduction, assuming 13k miles/year, 15-year life vehicle via Argonne National Laboratory AFLEET CFI Tool.

SolarShares contributed 329 GWh, or 41% of Green Pricing sales, supported by increased participation in Neighborhood SolarShares and Residential SolarShares. Combined, these programs grew year over year by more than 300%, to over 11 GWh. The Residential SolarShares program, designed for low to moderate income customers, serves over 2,000 participants and continues to grow. By 2025 year end, 11% of all residential accounts were enrolled in either Greenenergy, Residential SolarShares, or Neighborhood SolarShares, while 3% of eligible commercial customers participated in Greenenergy or SolarShares.

D. Exploring Emerging Clean Technologies

To fully decarbonize our energy supply by 2030 as part of our ZCP, we must explore emerging clean technologies. Emerging clean technologies have the potential to keep our power reliable during the days, weeks, or even months when established but intermittent clean technologies, like solar, storage, and wind, may not generate electricity, such as cloudy or low wind periods. In 2025, SMUD continued to track progress on the 550 MW Sutter Energy Center in Sutter County, which would store up to 1.7 million MT GHG annually if successful. SMUD plans to discuss a potential power purchase agreement with the Board in 2027. Although the US DOE cancelled a grant award for this project in 2025, Calpine continues to develop the project, leveraging federal carbon tax credits that significantly reduce cost. Staff also continued to evaluate promising energy storage technologies, clean fuel opportunities and other emerging technologies such as advanced geothermal. While most of these technologies have a long way to mature, we continued to keep a pulse on the next-gen clean technologies being explored by industry.

E. Local and Regional Benefits and Under-resourced Communities

SMUD's tailored approach to engaging and investing in our under-resourced communities and helping to support their transition to zero carbon is strategically driven by the Community Impact Plan (CIP). In the plan's fourth year of implementation, SMUD expanded its engagement efforts to include additional neighborhoods, increased outreach in a wider range of languages, forged new community-based partnerships, and enhanced the installation of electrification measures in both commercial and residential buildings. Several highlights of this work in 2025 are included below, with additional detail and key projects included in Appendix C.

Electrification in Under-resourced Communities

In 2025, CIP funds supported:

- Residential Neighborhood Electrification – 2,720 energy efficiency and electrification measures installed for 319 income-qualified customers in the Meadowview neighborhood.
- Business District Electrification – 159 energy efficiency and electrification measures installed at 39 commercial sites in the greater Sacramento region.

Local Workforce Development

Through a collaborative and community-based approach, we partnered with community organizations and educational institutions to support training programs that advanced jobs and skills related to emerging zero carbon energy and electrification. As a result of these programs, participants from under-resourced communities will be well-positioned to fill the workforce needs to support the clean energy transition. In 2025, the Regional Workforce Development team partnered with 44 community organizations to reach 4,012 youth and adults with career education and training and help 834 trainees find meaningful employment.

F. Distributed Generation and Storage

SD-9 requires that SMUD develop programs to promote cost effective, clean distributed generation. The following describes progress on these programs in 2025.

Flexible Demand Programs

Our flexible demand programs seek to partner with our customers and their connected devices and distributed energy resources, benefiting both the customer and the grid. The following programs made notable contributions to our load flexibility goals in 2025:

- My Energy Optimizer Partner+ program for battery storage (a residential virtual power plant program) enrolled 1,361 new customer batteries in 2025, resulting in 1,674 total batteries enrolled for a total of 8.8 MW of flexible load capability.³
- My Energy Optimizer Partner program for smart thermostats enrolled 7,653 new devices in 2025, totaling 38,080 devices installed in the homes of 30,840 customers, including 665 on the Critical Peak Pricing rate,⁴ with total potential flexible load capacity of almost 30 MW.
- Peak Conserve program for AC load control switches installed 53 new devices, totaling 1,749 devices for 1.4 MW of potential flexible load capacity.
- PowerDirect®, an automated demand response (ADR) program for commercial customers, had 42 customers across 383 sites enrolled and achieved a flexible load potential of 29.1 MW by the end of 2025.

Customer-side Solar and Storage

Customer-sited distributed generation and storage continued to expand in 2025, with 35.6 MW of new solar and 17.7 MW of new storage added during the year. By the end of 2025, SMUD had over 450 MW of cumulative customer solar and over 35 MW of cumulative customer storage.⁵ For more detailed information, see Appendix C.

4. Challenges

SMUD continues to make progress towards SD-9 goals, but challenges remain. In 2025, these included delays in project development timelines, project cancellations, reduced federal funding for carbon reduction projects, and significant resource cost increases. Despite these challenges, SMUD remains committed to developing and identifying new clean energy projects that advance us closer towards our goals, while staying within our financial and reliability guardrails.

5. Recommendation

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

³ These numbers do not directly correlate with the battery system installations in Table 5 below, as those systems can have multiple batteries included in each project.

⁴ Critical Peak Pricing (CPP) is an optional time-based rate. This rate is in addition to the Time-of-Day Rate (5-8 p.m.) and gives customers a discount throughout non-Peak-Event hours in exchange for higher prices during Peak Events.

⁵ Cumulative customer storage reported here is in addition to the battery storage installed through the My Energy Optimizer Partner+ program.

Appendix A – SD-9 History

SD-9 was established by our Board in 2004 to guide our ongoing environmental leadership and our IRP process, balancing financial and customer rate impacts, reliability requirements, and equity considerations. Since then, our strategic directions have evolved in response to changes in markets, policies, and laws. In December 2008, the Board added sustainable power supply as a core objective of the IRP process and set a GHG emissions target.

In 2018, the Board updated our GHG reduction goals to include a 2040 Net Zero GHG goal. Subsequently, in 2020, our Board adopted a Climate Emergency Resolution, committing to work towards carbon neutrality by 2030. Also in 2020, the Board adopted carbon-based targets for energy efficiency and building electrification, making SMUD the first major utility to use carbon as a tracking metric for efficiency.

In April 2021, the Board adopted Resolution No. 21-04-04, updating SD-9 to align with our ZCP goal of zero GHG emissions in our energy supply by 2030, along with specific goals for GHG reductions related to electrification.

To achieve our goal of zero carbon by 2030, we are focusing on:

- Procuring new zero carbon and renewable energy resources.
- Expanding customer programs for energy efficiency and building and transportation electrification.
- Developing new customer programs and investigating emerging zero carbon technologies.
- Continuing our efforts to improve equity for our under-resourced communities and enhancing the health of our ecosystems.

Under SD-9, our goal is more ambitious than California's planned trajectory, which requires utilities to source at least 60% of retail sales with eligible renewable resources by 2030 and aims for economy-wide carbon neutrality by 2045. However, we recognize the utmost importance of maintaining affordable rates and reliable service while we aim to achieve our SD-9 goals.

Appendix B – Methodology

GHG Emissions Adjustments

SMUD's reported emissions for SD-9 are based on SD-7 emissions with adjustments to help explain the main components driving changes in our emissions result for the year. These key drivers include customer load, hydro generation, and wind generation; variables that we plan for but diverge to some extent from our plans each year. At the start of each year, we establish an estimated forecast for load, hydro, and wind generation based on expected weather patterns and customer growth. Unexpected and extreme weather events can significantly impact actual emissions, which is why these adjustments are necessary. For example, severe drought can reduce hydro generation, resulting in a greater reliance on nonrenewable resources and requiring corresponding reduction to SD-9 emissions. Therefore, these adjusted emissions represent what our emissions would have been if our forecasts were realized. The adjustments to actual GHG emissions in 2025 include:

- A *decrease* to account for higher-than-expected customer load.
- A *decrease* to account for lower-than-expected hydro production.
- A *decrease* to account for lower-than-expected wind production.

Appendix C – Detailed Project Descriptions

Energy Efficiency and Building Electrification

Our goal is to have building electrification and energy efficiency programs reduce GHG emissions by 365,000 MT in our community by 2030, the equivalent of electrifying 112,000 single family homes (see Table 2 for progress on this goal). Our building electrification and energy efficiency programs proactively support residential and commercial customers across the region by providing tailored solutions that facilitate total energy cost savings. The following programs have made notable contributions to our carbon reduction progress in 2025:

- **Advanced Home Solutions:** Supported by the quality and integrity of the hundreds of participating contractors in the SMUD Contractor Network, our Advanced Home Solutions (AHS) program achieved significant milestones in 2025. Between the program's inception and the end of 2025, AHS supported over 25,000 heat pump installations, making homes more energy-efficient and comfortable, which equates to a total of over 11,000 all-electric equivalent homes. Additionally, the AHS team launched Xerohome, an online home energy modeling tool that provides customers visibility into energy and bill savings through electrification, empowering informed decision-making.
- **Commercial Electrification:** In 2025, we completed 416 commercial electrification and energy efficiency projects, a 34% increase from 2024. Of those projects, commercial electrification was the primary project type, marking a shift as these measures outpaced traditional energy efficiency efforts for the first time. This growth reflects how these programs, which offer incentives, technical support, and planning tools like the new Grid Capacity Evaluation tool, are helping commercial customers and contractors plan for and advance electrification in the region.

Table 3 provides a detailed summary of our 2025 energy efficiency and building electrification accomplishments by the numbers, including offerings for our income-qualified customers.

Table 3: Energy Efficiency and Building Electrification Accomplishments

Measures & Projects Highlights	Install Count
Commercial Retrofit Projects Completed	403
New Efficient Commercial Buildings Projects Completed	13
Multifamily Units Retrofitted	384
Efficient Induction Cooktops (Electric to Electric)	185
Efficient Induction Cooktops (Gas to Electric)	382
Residential Heat Pump Water Heaters Installed (Electric to Electric)	52
Residential Heat Pump Water Heaters Installed (Gas to Electric)	789
Residential HVAC Installations (Electric to Electric)	356
Residential HVAC Installations (Gas to Electric)	3,797
Residential Seal and Insulate Installations	275
All Electric New Homes and Multifamily units Constructed	2,208

Income-Qualified Measures & Projects Highlights	Install Count
Panel Upgrades	84
Heat Pump Space Heating (Gas to Electric)	378
Heat Pump Water Heaters (Gas to Electric)	149
Induction Stoves (Gas to Electric)	44
Induction Hot Plates for Renters	97
Total energy efficiency bundles and electrification measures ⁶	3,330

Transportation Electrification

Our goal is to have our vehicle electrification programs reduce transportation GHG emissions by 1,000,000 MT in our community in 2030, the equivalent of electrifying 288,000 vehicles (see Table 2 for progress on this goal). In 2025, we expanded our residential and commercial transportation electrification programs to support the adoption of electric vehicles throughout our service territory, with particular attention to under-resourced communities.

SMUD's **residential** Drive Electric program continued to promote the adoption of plug-in EV's through a variety of program offerings. Below are some metrics related to the residential Drive Electric program in 2025:

- EV Rate Credit: 6,439 new enrollments were added in 2025. Approximately 47% of residential EV households, equivalent to 36,028 customers, participate in the EV rate credit (midnight to 6 AM EV charging discount).⁷
- Ride & Drive: Seven EV Ride & Drive events were held across our territory, attracting 2,127 unique participants.
- Charge@Home: The program issued a total of 2,623 rebates to residential customers, including 1,281 for EV chargers, 1,035 for EV circuit installations, and 307 for circuit sharing devices.
- EV Advisor: This program offered personalized one-on-one EV advice and support to 6,849 customers. Over 80% of inquiries were related to incentive information, with the rest being questions about charging, billing, and vehicles.
- Clean Cars for All: We continued integral support of the Clean Cars for All program in partnership with Sacramento Metropolitan Air Quality Management District (SMAQMD). This program provides up to \$12,000 toward a new or used PHEV for income-qualified residents living in areas affected by higher levels of pollution. We installed 86 EV chargers for income-qualified residents through this program.
- Additional Income-Qualified Installations: In addition to the support provided through the Clean Cars for All program, we installed 180 EV supply equipment (EVSE) and 344 EV circuits, for income-qualified customers to prepare these homes for the future addition of an EV.

SMUD's **commercial** EV Programs support EV charging projects at businesses and multi-family sites. The updates for 2025 include:

⁶ This includes all measures implemented for income-qualified customers throughout the year, including the electrification work for income-qualified customers highlighted in the previous rows (panel upgrades, heat pumps, induction stoves and hot plates), as well as installation of weatherization, LED light bulbs, bug screens, attic insulations, EV circuits, EVSE equipment, etc. This total also includes all neighborhood and business district electrification measures reported in Section 3E.

⁷ SAP Installation Fact 5090 Rates report, and EPRI Vehicles in Operation report.

- **Commercial Installations:** Total Commercial EV program incentives in 2025 included the installation of 621 Level 2 EV chargers and 59 DC fast chargers. Level 2 chargers comprised of 593 installed through the Commercial EV program and 28 from the California Electric Vehicle Infrastructure Project (CALeVIP). A total of 122 of the Level 2 handles installed were installed at equity projects serving under resourced communities. Nearly half of the program incentives in 2025 helped fund projects at multi-family sites, expanding access to EV charging to renters in these communities.
- **eFuel Services:** The eFuel Solutions program completed four projects in 2025. Three sites belonging to County of Sacramento now have 35 Level 2 and four DCFC handles and were prepped for an additional 30 Level 2 and two DCFC handles. The fourth was for two Level 2 handles at the Sacramento International Airport.
- **FAST Grant:** Construction planning and design work continued at two strategic locations in Sacramento including the Sacramento International Airport and California State University Sacramento for the California Energy Commission’s FAST (Fast and Available Charging for All Californians) grant. This effort to deploy DC fast chargers will increase access to EV charging for ride-share drivers, food delivery drivers, rental car fleets, shared mobility services, nearby residents, long-distance travelers and the public. The grant also funds the development of a new EV App initiative aimed at increasing charging affordability for ride share drivers and income-qualified multifamily residents.

Renewables Portfolio Standard

State law requires that SMUD procure renewable generation for at least 60% of retail sales by 2030 as well as achieve interim targets over several compliance periods.⁸ The State determines compliance with RPS obligations over multi-year compliance periods, rather than strictly within individual years, in acknowledgment of the “lumpiness” of new resource additions and to provide some flexibility to utilities.

In 2025, renewable generation increased relative to 2024 due to new long-term contract generation, and additional short-term renewable procurement needed to meet RPS. Short-term renewable contracts are used to fill shortfalls in renewables needed to meet RPS compliance requirements, usually due to renewable project delays or under-delivery. SMUD continues to plan RPS eligible resources to meet future compliance period requirements.

Clean Resource Progress and Development

Our project development pipeline for utility-scale zero carbon technology projects is shown in Table 4. The table includes completed, under development, and planned procurement activities since adoption of the ZCP in 2021.

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 set a statewide planning goal to meet 100% of retail electricity sales with RPS eligible and zero-carbon resources by 2045.

Table 4: Project Development Pipeline

Project Name	Resource Type	Projected Online Year	Status September 2026	Size (MW)	Equivalent Homes Powered	GHG Reduction Potential (thousand MT/year)
Completed ZCP Projects - As of End of 2025						
Hedge	Battery (Local)	2022	Online	4	800 (peak)	0
NTUA (Drew)	Solar PV	2022	Online	100	34,600	121
Calpine Geysers	Geothermal	2023	Online	100	97,300	342
Solano 4 (Solano 1 Repower)	Wind	2024	Online	86	25,800	90
Sloughhouse	Solar PV (Local)	2025	Online	50	15,400	54
Hatchet Ridge	Wind	2025	Online	101	30,500	107
CPP Retool (Turndown)	Thermal Retrofit	2025	Online	n/a	n/a	100
Completed Subtotal	Generation			437	204,400	814
	Storage			4		
Planned ZCP Projects – As of End of 2025						
SunZia	Wind	2026	PPA Signed, Online April 2026	150	54,200	190
Country Acres	Solar PV (Local)	2027	PPA Signed, Under Construction	344	70,800	248
	Battery (Local)			172	34,400 (peak)	0
S2PVI (TerraGen)	Solar PV	2027	PPA Signed	46	13,900	49
Dry Creek	Battery (Local)	2027	PPA Signed, Under Construction	160	32,000 (peak)	0
Grace	Solar PV	2027	PPA Signed	70	16,300	57
Calpine Geysers*	Geothermal	2028	PPA Signed	25	23,100	81
		2030		25	23,100	81
Sutter CCS	CCS	TBD	Under Evaluation	TBD	TBD	TBD
Solano 2 Repower	Wind	TBD	Under Evaluation	94	36,400	128
Oveja Ranch	Solar PV (Local)	TBD	Under Evaluation	75	21,100	74
	Battery (Local)			38	7,600 (peak)	0
Curry Creek	Solar PV (Local)	TBD	Under Evaluation	156	23,500	83
	Battery (Local)			up to 156	31,200 (peak)	0
Planned Subtotal	Generation			985	387,600	991
	Storage			526		
Grand Total	Generation			1,422	592,000	1,805
	Storage			530		

*The same contract as the online project, generation increases during the contract period

Looking forward, we continue to explore various options to procure or develop additional renewable and zero carbon resources, including local solar and storage. Potential projects are thoroughly screened based on cost, projected online date, environmental and cultural impacts, and feasibility to ensure projects meet our specific requirements. We are actively discovering and pursuing new project opportunities in support of our 2030 zero carbon goal.

Local and Regional Benefits and Under-resourced Communities

At SMUD, our community is at the heart of all we do. We are working with and listening to our customers to develop programs that support livable and resilient communities. Our Sustainable Communities Resource Priorities Map is a key resource, helping guide resource allocation toward reducing growing economic disparity in Sacramento County and ensuring the benefits of our ZCP are shared equitably among all communities. In 2025, our work included:

- Building Electrification and Energy Efficiency. Continued expansion of efforts to provide no-cost energy retrofit installations to income-qualified residential customers, focusing on both gas-to-electric conversions and electric-to-electric upgrades. Notable income-qualified project highlights are found in Table 3.
- Transportation Electrification. SMUD's EV programs provided low cost or free EV charging infrastructure for income-qualified customers along with expertise in home charging solutions. EV measures implemented for income-qualified customers are reported in the Transportation Electrification section above.
- Distributed Generation and Storage. Participation in SMUD's portfolio of distributed generation and storage can sometimes require costly technologies, such as a smart thermostat, EVs, or solar and battery storage systems. Because of these potential barriers, we continued to explore inclusive approaches for our programs. For instance, SMUD's Peak Conserve Program offers free installation of AC load control devices to ensure all customers can take part in our load flexibility offerings. In 2025, we also supported equitable access to solar and battery storage by installing 54 solar and battery storage systems for income-qualified customers, through our partnerships with Habitat for Humanity and Grid Alternatives, enabling customers to participate in our virtual power plant program.
- Shine Awards. The Shine Awards program invests in local nonprofit partners that execute inclusive and equitable projects through collaborations and partnerships supporting our historically under-resourced communities. In 2025, 98 organizations submitted applications, and 22 projects totaling \$534,728 were awarded. Projects included clean energy education initiatives, STEM learning opportunities for youth and educators, workforce development and career exploration in zero carbon careers, energy-efficient facility and equipment upgrades, and improvements that expand access to food distribution, safety education, and other vital community services.
- SES Renter Bundle. Research-based initiative aimed to support low and low-moderate income renters that typically have less ability to engage in electrification or energy efficiency upgrades to their rented homes. By providing renter-friendly products and services (portable fans, energy efficient light bulbs, power strips, and portable desk lamps), SMUD can help this group of customers feel more comfortable in their homes and save on their energy bills. Bundle recipients can also gain one-on-one energy saving recommendations and tips from Energy Specialists to make their home more energy efficient and improve indoor air quality.
- Land Use & Climate Innovation: Extreme Heat & Climate Resilience Round (EHCR): In partnership with the Sacramento City School District, SMUD began executing a \$750k EHCR planning grant focused on engineering a solar-powered microgrid.
- Workforce Development. Our 2025 Regional Workforce Development programs recruited, trained, and facilitated the placement of individuals from neighborhoods highlighted by our Sustainable Communities Resource Priorities Map to work in areas directly impacting our region's ability to meet our 2030 zero carbon goals. In 2025, we worked with partners to train our community in skills related to solar, battery, EV, and electrification technologies and supported graduates with employment success services such as connecting with employers, resume writing advisory, and career coaching. Key work in 2025 included:
 - Worked to ensure that largescale infrastructure and grant projects have demonstrable community benefits, and realized benefits in several SMUD projects, creating equitable pathways to employment opportunities.

- Continued to support the Electrician Trainee program with NCCT, which trained 104 people and facilitated placement of 37 people in jobs leading to careers. The focus of the program is to help put more diverse apprentices in the IBEW pipeline.
- Partnered with Cosumnes River College to continue to support a Construction Electrification course that provides enrollees with a stipend to complete 36 hours of lecture and 54 hours of hands-on learning. The focus of the course is on understanding the importance of building electrification and how to install heat pumps, EV chargers, and other supporting electrical infrastructure. Upon graduation, students earn industry relevant certifications along with 3 course units that can be applied to a Construction Pre-Apprenticeship or Construction Management Credential. 55 individuals completed the class in 2025.
- Through our ongoing partnership with Grid Alternatives, 64 people received solar and electrification training, with 34 participants being placed into jobs.
- Salvation Army's construction training program incorporated a technology component into its curriculum with the support of SMUD, providing participants with Chromebooks. This access to technology also enhanced the learning experience for students in the Oak Park After School Program. In addition to energy efficiency improvement projects at the Salvation Army's Alhambra campus, the organization established an annual energy education program that aligns with SMUD's zero carbon plan.

Customer-side Solar and Storage

Table 5 summarizes customer solar and storage installations at homes and businesses in 2025.

Table 5: 2025 Customer Solar PV and Storage Installations⁹

	Residential		Commercial		Total	
	Installed Systems	MW	Installed Systems	MW	Installed Systems	MW
Customer Solar PV	5,660	25.5	441	10.1	6,101	35.6
Customer Storage	1,233	17.4	3	0.3	1,236	17.7

⁹ This table includes net-energy metering (NEM), Solar Smart, virtual net-energy metering (VNEM), and Solar and Storage Rate installations.

RESOLUTION NO. 26-09-06

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, by Resolution No. 22-10-14, adopted October 20, 2022, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2023 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 23-09-08, adopted September 21, 2023, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2024 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 24-09-07, adopted September 19, 2024, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2025 to SMUD employees, retirees and eligible dependents; and

WHEREAS, by Resolution No. 25-09-02, adopted September 18, 2025, this Board authorized an extension of the **Kaiser** contract to provide medical benefits for the year 2026 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 2027 premiums through December 31, 2027, 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 her designee, is authorized, on behalf of the SMUD, to approve 2027 medical insurance rates and extend Contract No. 4500043215 with **Kaiser Permanente** by one year, for the period January 1, 2027, through December 31, 2027, with the 2027 cost estimated at \$43 million pursuant to the premiums set forth in **Attachment D** hereto and made a part hereof.

Section 2. The Chief Executive Officer and General Manager, or her designee, is authorized to make future changes to the terms and conditions of the contract that, in her 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: September 17, 2026

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

**Attachment D
to Resolution No. 26-09-06**

**2027 Kaiser Permanente
Active Employee & Retiree Monthly Medical Premium Rates**

Active		Basic		
Carrier	Employee Only/ Retiree Only	Employee + 1/ Retiree +1	Employee + Family/ Retiree + Family	
Kaiser HMO – High Plan	\$1,096.04	\$2,192.08	\$3,288.12	
Kaiser HMO – Low Plan	\$1,039.33	\$2,078.66	\$3,117.99	
Retiree Kaiser HMO Plan	\$1,096.04	\$2,192.08	\$3,288.12	

RESOLUTION NO. 26-09-07

WHEREAS, by Resolution No. 24-09-06, adopted on September 19, 2024, this Board awarded Contract No. 4500147540 to **UnitedHealthcare Insurance Company (UHC)** to provide administration of SMUD's medical benefits plan for an initial three-year period from January 1, 2025, to December 31, 2027, with two optional one-year extensions, for a contract total not-to-exceed amount of \$275 million; and

WHEREAS, by Resolution No. 25-09-03, adopted on September 18, 2025, this Board approved 2026 medical insurance rates with the 2026 cost estimated at \$48 million, and;

WHEREAS, **UHC** presented SMUD with a renewal increase for the 2027 plan year of 16.6% for active employee, pre-65 retiree and Medicare Advantage medical plans; and

WHEREAS, the percentage increase is determined by a 12-month utilization period where there were significant increases in utilization due to an increase in serious illnesses and associated pharmaceutical costs; and

WHEREAS, the 16.6% increase is based on the difference in the aggregated total cost of premiums for active employees and retirees (and dependents) enrolled in UHC plans from 2025 to 2026; and

WHEREAS, it would be in SMUD's best interest to approve the 2027 premiums through December 31, 2027, 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 her designee, is authorized, on behalf of SMUD, to approve 2027 medical insurance rates with the 2027 cost estimated at \$48 million pursuant to premiums set forth in **Attachment E** hereto and made a part hereof.

Section 2. The Chief Executive Officer and General Manager, or her designee, is authorized to make future changes to the terms and conditions of the contract that, in her 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: September 17, 2026

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

**Attachment E
to Resolution No. 26-09-07**

**2027 United HealthCare
Active Employee Monthly Medical Premium Rates**

Active Employees		Basic		
Carrier		Employee Only	Employee + 1	Employee + Family
UnitedHealthcare Signature Value HMO – High Plan		\$1,659.78	\$3,502.12	\$5,012.51
UnitedHealthcare Signature Value HMO – Low Plan		\$1,492.02	\$3,148.11	\$4,505.92
UnitedHealthcare Signature Alliance HMO – High Plan		\$1,257.70	\$2,653.75	\$3,798.25
UnitedHealthcare Signature Alliance HMO – Low Plan		\$1,130.58	\$2,385.50	\$3,414.39
UnitedHealthcare High Deductible Health Plan		\$1,193.41	\$2,518.11	\$3,604.11
UnitedHealthcare PPO Plan (plan closed to new participants based on high cost)		\$2,307.14	\$4,868.07	\$6,967.55

**2027 United HealthCare
Retiree Monthly Medical Premium Rates**

Retiree		Basic		
Carrier		Retiree Only	Retiree + 1	Retiree + Family
UnitedHealthcare Signature Value HMO		\$1,659.78	\$3,502.12	\$5,012.51
UnitedHealthcare Signature Alliance		\$1,257.70	\$2,653.75	\$3,798.25
UnitedHealthcare PPO – in CA		\$2,307.14	\$4,868.07	\$6,967.55
UnitedHealthcare PPO – out of CA		\$2,307.14	\$4,868.07	\$6,967.55

President Tamayo then turned to Discussion Calendar Item 12, to discuss, with possible action, authorizing the Chief Executive Officer and General Manager to negotiate and execute contracts with proposers identified on the Notice of Intent to Award for Request for Proposals No. 15735.KM for Civil Annual Construction Services.

Joe Schofield, Deputy General Counsel, gave a presentation regarding Discussion Calendar Item 12. A copy of the slides used in his presentation is attached hereto.

No public comment was forthcoming for Discussion Calendar Item 12.

After some discussion, Director Sanborn moved to authorize the Chief Executive Officer and General Manager, or her designee, to negotiate and award contracts to Sierra National Construction, Inc. and Doug Veerkamp General Engineering, Inc (collectively, the "Contracts") for Civil Annual Construction Services for a three-year period in an aggregate not-to-exceed amount of \$150 million across the Contracts, Director Fishman seconded, and Resolution No. 26-09-08 was approved by a vote of 5-0, with Directors Bui-Thompson and Kerth absent.

RESOLUTION NO. 26-09-08

WHEREAS, in December 2025, SMUD issued Request for Proposal No. 15735.KM (RFP) to solicit qualified firms to provide civil annual construction services; and

WHEREAS, 11 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, **Sierra National Construction, Inc. (SNC)** and **Doug Veerkamp General Engineering, Inc. (Veerkamp)** are hereby determined and declared to be the two highest evaluated responsive proposers for civil annual construction services.

Section 2. The Chief Executive Officer and General Manager, or her designee, is authorized, on behalf of SMUD, to negotiate and award contracts to **SNC** and **Veerkamp** (collectively, the **Contracts**) for Civil Annual Construction Services for a three-year period for an aggregate not-to-exceed amount of \$150,000,000 across the **Contracts**.

Section 3. The Chief Executive Officer and General Manager, or her designee, is authorized to make future changes to the terms and conditions of the **Contracts** that, in her 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: September 17, 2026

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

President Tamayo then called for public comment for items not on the agenda.

Sapphy, a member of the public, stated she was respectfully protesting the partnership with Link Logistics and the combined effort to convince the City Council to approve a 50MW+ data center. She spoke with regard to impacts on quality of life, water use, noise pollution, and increased utility bills. She requested the Board to cease lobbying of City Councilmembers and the Mayor and to not do the data center.

President Tamayo asked to clarify if Sapphy was asserting that SMUD, as an organization, was lobbying the City to approve a data center project.

Sapphy stated that, as she understood it from an article she had read about the Link Logistics project, Councilmember Eric Guerra was vehemently against the data center; however, the article had referenced a recent productive meeting.

President Tamayo thanked Sapphy for her comment and stated that the Board had made clear its direction to staff that data centers will pay their own way, and SMUD will not accept powering them up to increase rates and result in stranded assets. He then asked CEO Anguay to address SMUD's limitations and role in the process.

Ms. Anguay stated that SMUD has an obligation to serve any business or project that is approved by the Cities or Counties. She stated that the Board has directed SMUD to ensure that all large load customers or data center customers pay for their energy usage and infrastructure required to support them so that the costs do not get passed on to customers.

Hermán Barahona, Executive Director of the Sacramento Environmental Justice Coalition and member of the Executive Board of the Sierra Club Mother Lode Chapter, stated that the organizations are deeply concerned about the building of data centers. He stated there is concern about the number of data centers, the urban heat effect, what happens with chemicals when they are flushed from the cooling systems, and the energy and environmental impacts

on the communities. He stated he was in attendance on behalf of the groups to request a slow down and to request more information be provided.

Ayana Looney stated she had submitted written comment and asked for clarification on what is meant about data centers paying their own way.

Ms. Lewis clarified that because the item is not on the agenda, the Board could not have an active discussion on the topic.

Ms. Looney then spoke to data centers, referencing points in her written comment, a copy of which is attached.

Ms. Lewis made a brief clarifying statement to note that SMUD has an obligation to serve, which includes building new facilities, and that SMUD is now allowed, under California law, to disclose customer information such as name, address, or usage data.

President Tamayo asked Ms. Lewis to clarify that if there is an agreement that is necessary to provide power or have any sort of special infrastructure, those items would be subject to Board approval, as well as public comment.

Ms. Lewis stated that, as CEO Anguay had mentioned, the Board has been clear that large load customers would be required to pay for upgrades or other costs related to service, and the costs would not be spread to existing customers. She again noted that she was briefly clarifying because the item was not agendaized.

President Tamayo stated an assertion had been made with regard to lobbying.

Ms. Lewis stated that SMUD does not lobby for customers. She stated that SMUD has a relationship with Cities and Counties, and SMUD coordinates with the Cities and Counties to keep them apprised of activity within the service territory, but SMUD does not lobby for companies or customers.

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

- Alex Severson
- Eden Hirsh
- Ori Briarton
- Cheryl Lemons

- John Weber

President Tamayo then turned to Directors' Reports.

Director Rose stated the 25th anniversary of the September 11 attack had just passed, and he wanted to thank veterans on staff and the Military Employee Resource Group at SMUD for their service. He then reported on his attendance at the City of Citrus Heights ribbon cutting for the undergrounding work done for Auburn Boulevard, the ribbon cutting for the Boys & Girls Club of Greater Sacramento, the Citrus Heights Elected Officials Reception, the Sacramento Splash Annual Backyard Bash for Splash, and the 80th Anniversary Celebration of the Folsom Chamber of Commerce's Choose Folsom. He then stated that the Board had a thorough large load discussion in June and gave some specific direction to staff, including increasing public outreach.

Director Fishman reported that he had met with the Badassery Group, led by Tina Reynolds and Marina Texeira, to discuss data centers and large loads and stated that he had shared with them that the Board has given staff direction to come back with a policy. He then reported on his speaking engagement at the ribbon cutting for the EmPOWERment Park, an all-inclusive play park designed for children with disabilities. He also reported on his attendance at the Valley Vision We Prosper Together 2026 Catalyst Summit, the Northstate Building Industry Association's Sacramento Builders & Brews, and the Sacramento Splash Annual Backyard Bash for Splash.

Director Herber reported on her attendance at the Rancho Cordova Area Chamber of Commerce Elected Officials Reception, her speaking engagement at the Elk Grove Chamber of Commerce Leadership Elk Grove, and her attendance at the Sacramento State University President Fall Address and Sierra Curtis Neighborhood Association's Music in the Park Event. She reported on her participation in a call about solar over canals and stated her opinion that it was something SMUD look into. She concluded by reporting on her attendance at the Sacramento History Museum's History on Stage event.

Director Sanborn reported on her attendance at the HumanBulb event and a luncheon for the Carmichael Chamber of Commerce where they

toured a SMUD-sponsored energy and electrical training center at American River College. She thanked staff for their assistance in creating her video acceptance for the Pioneer Award at the Green California Summit and then reported on her attendance at the EmPOWERment Park ribbon cutting, a fundraiser for El Dorado County Ag in the Classroom, the Celebrate North Highlands event organized by the Foothills Highlands Rotary Club, her visit to the Boys & Girls Club of Greater Sacramento, and the Sacramento Metropolitan Air Quality Management District's 30th Anniversary Reception. She concluded by reporting on her attendance at the Sacramento Splash Backyard Bash.

President Tamayo reported on his meeting with Sacramento City Unified School District Trustee Jasjit Singh, his visit to the Boys & Girls Club of Greater Sacramento, his participation in the KidWind contact at the Aerospace Museum, his attendance at SMUD's Meet the Buyer event, and his speaking engagement with the Sacramento Regional Association of Malayalees. He stated he had written an extensive post on Facebook about SMUD's role in artificial intelligence (AI) and invited the public to review his post. He then reported on his meeting, along with Chief Diversity Officer Jose Bodipo-Memba, with the leadership of Hispanics in Energy to discuss workforce engagement in Latino communities. He concluded by reporting on his attendance at the CAPBIO Summit at Aggie Square.

Lora Anguay, Chief Executive Officer and General Manager, reported on the following items:

- 1) **National Hispanic Heritage Month.** This week, National Hispanic Heritage Month begins, which runs from September 15 to October 15. This is an opportunity to honor the rich history and tradition of the vibrant Hispanic culture and the significant contributions of people with roots in Spain, Mexico, the Caribbean, Central America and South America. A special thanks to LUNA, our SMUD employee resource group that stands for Latinos Unity Network for Action, for all they do to

support our employees and create opportunities to grow and share knowledge across our community.

2) **Meet the Buyers.** As President Tamayo mentioned, it was terrific to see such a large turnout at our annual Meet the Buyers event for local vendors who want to do business with SMUD. More than 350 attendees representing small businesses attended! This is part of our ongoing efforts to make sure the entire community is benefiting as we transition to a clean energy economy. In 2025, we awarded 31% of our contracts to Supplier Education and Economic Development (SEED) program vendors, totaling 107 contracts worth \$97 million. That is money that stays right here in our local economy to support jobs, small businesses and families. This event gave local businesses an opportunity to connect with our purchasing team, explore upcoming procurement opportunities, and network with others. Thanks to everyone who made this year's event another success!

3) **Sustainable Communities Partnership Summit.** We also held our 7th annual Sustainable Communities Partnership Summit this month. The event brought together our nonprofit and organization partners to share ideas, build connections and explore ways to strengthen career opportunities and our community. This year's theme, Communities & Careers, was hosted by our Sustainable Communities Partnerships and Regional Workforce Development teams. The summit sparked meaningful conversations and new connections, reinforcing our commitment to inclusive growth and collaboration across the communities we serve.

4) **Awards.** Next, I would like to highlight some exciting, recent awards. At the Sacramento Hispanic Chamber of Commerce's inaugural Hispanic Economic Impact Awards, we were

recognized with the Economic Impulso Award. This honors organizations that demonstrate leadership, investment and collaboration in expanding economic opportunity for Hispanic businesses, workers and families. Director Heidi Sanborn was recognized with the Pioneer Award at the Green California Summit 2026 for her transformative leadership in advancing green technology over her three decades in the solid waste and environmental policy sectors. Congratulations, Director Sanborn! And in late breaking news, Director Nancy Bui Thompson could not be with us tonight because she is being honored by the Sac Cultural Hub Media Foundation as a 2026 Exceptional Woman of Color (EWOC). Congratulations, Director Bui-Thompson, for demonstrating leadership, service and impact that is shaping communities across the Greater Sacramento region! Lastly, SMUD has three employees that were named a 2026 Changemaker by the *Sacramento Bee*, in partnership with Nehemiah Leaders Programs. Jenny Rodriguez in our Economic Development and Partnerships team, Toni Hoang in our Reliability Compliance and Coordination team and myself. It is a tremendous honor to share the spotlight with 60 local innovative and diverse leaders who are shifting our region's landscape. Congratulations to Jenny and Toni! Congratulations to everyone on these accomplishments!

5) Board Video. Tonight's video features our

Telecommunications team. Telecom is responsible for designing, installing, maintaining and protecting our communication networks that keep our grid safe and reliable. In attendance here tonight, we have several members of our Telecommunications team, including Bri Swierstok, our

Manager of Telecommunications, and Eric Poff, who is our

Director of Substation Telecommunications & Metering Assets.

There were no items for the Summary of Board Direction.

No further business appearing, President Tamayo adjourned the meeting at 7:19 p.m.

Approved:

President

Secretary

Exhibit to Agenda Item #12

Discuss, with possible action, authorizing the Chief Executive Officer and General Manager to negotiate and execute contracts with proposers identified on the **Notice of Intent to Award for Request for Proposals No. 15735.KM** for Civil Annual Construction Services.

Board of Directors Meeting

Thursday, September 17, 2026, scheduled to begin at 6:00 p.m.

SMUD Headquarters Building, Auditorium

Procurement Award Outcome

Responsive Proposals Received	P/F	SEED Points 10	Technical Points 50	Price Points 40	Total Score 100	Rank	Proposal Amount	SEED Credit	Evaluated Proposal Amount	Proposed Award Amount
Sierra National Construction, Inc.	P	10	44.25	37.54	91.79	1	\$262,987,910	\$250,000	\$262,737,910	Not-to-Exceed \$250 million Aggregate Amount of all Task Authorizations
Doug Veerkamp General Engineering, Inc.	P	10	41.88	38.00	89.88	2	\$244,543,744	\$250,000	\$244,293,744	
Arrow Construction	P	10	45.00	34.24	89.24	3	\$287,706,855	\$250,000	\$287,456,855	
Mountain G Enterprises, Inc.	P	10	41.88	35.16	87.03	4	\$279,152,820	\$250,000	\$278,902,820	
Syblon Reid Contractors	P	10	40.38	35.50	85.88	5	\$271,666,010	\$250,000	\$271,416,010	
Shimmick Construction Company, Inc.	P	10	37.00	32.15	79.15	6	\$288,626,584	\$250,000	\$288,376,584	
Outback Contractors, Inc.	P	0.59	40.88	35.99	77.45	7	\$255,423,639	\$250,000	\$255,274,216	
Lund Construction Co.	P	2.90	38.75	33.49	75.13	8	\$271,794,143	\$250,000	\$271,544,143	
SR Diversified, LLC	P	-	30.00	38.68	68.68	9	\$253,849,652		\$253,849,652	
Underground Electric Construction Company, LLC	P	-	28.88	33.14	62.02	10	\$257,996,241		\$257,996,241	

Non-responsive Proposals Received	Comments
Wampler Solutions, LLC	Incomplete proposal.

Procurement Strategy

- The Request for Proposal (RFP) solicited proposals to allow SMUD to award contracts on a best value basis.
- Criteria evaluated (commercial & technical):
 - Mandatory Pass/Fail Requirements
 - Supplier Education & Economic Development (SEED)
 - Company Experience and Qualifications
 - Personnel Experience and Qualifications
 - Safety
 - Environmental Sustainability
 - Commercial Terms (Price) and Compliance with SMUD's contractual terms
- SMUD staff conducted market outreach and engaged with contractors to notify them of the solicitation and confirm interest. 73 contractors were notified of the opportunity via SMUD's solicitation platform, Planet Bids. 20 contractors attended the Pre-Proposal Conference. 11 Proposals were received.

Why Two Contracts?

- Saves money;
- Meets staff's forecasted needs for work;
- Rewards contractors who worked with staff to adjust pricing;
- Reduces staff time managing the contractor relationship (work inquiries);
- Reduces time to prepare, process, and discuss task proposals;
- Decreases number of legally required payment bonds, saving up to an additional \$180k/year.

Requested Action

Authorize the Chief Executive Officer and General Manager, or her designee, to negotiate and award contracts to **Sierra National Construction, Inc.** and **Doug Veerkamp General Engineering, Inc.** (collectively, the **Contracts**) for Civil Annual Construction Services for a three-year period in an aggregate not-to-exceed amount of \$150 million across the **Contracts**.

[EXTERNAL] Public comment for the September 17 meeting regarding the Link Logistics data center

From Ayana Looney <w2039218@apps.losrios.edu>

Date Wed 9/16/2026 4:56 PM

To Public Comment <PublicComment@smud.org>

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 a SMUD customer, and I am writing to express my strong disapproval of allowing Link Logistics, a subsidiary of Blackstone Inc., access to the SMUD electricity grid for a large-load data center.

Existing Sacramento residents, schools, and businesses need greater access to green, sustainable, and affordable electricity, not less.

Climate change, rising heat, and demand for air conditioning are already taxing the SMUD electrical grid. A large-load data center would take much-needed power away from more than [140,000](#) homes, schools, and businesses from March to October.

Extreme heat is already a health hazard. People die in California every year due to [ever-increasing heat waves](#). Data centers contribute to climate change, and this one will also take the fuel we need to power our air conditioners [so we don't die](#) in the next heat wave.

SMUD needs to prioritize its human residents. Power to the People, not AI!

Please do not provide SMUD services to the Link Logistics data center. Humans need electricity to survive; Link Logistics wants to make a profit while we suffer.

Sincerely,

Ayana (eye-on-ah) Looney (she/her)

5800 Hamilton Street #189

Sacramento, CA 95842

w2039218@apps.losrios.edu

(425) 218-2263

The Library is the only data center you need.

[EXTERNAL] Large load data center public comment 9/17

From Alex Severson <severson.alex90@gmail.com>

Date Thu 9/17/2026 3:31 PM

To Public Comment <PublicComment@smud.org>

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.

Hey there,

I am a homeowner in district 6 and adamantly against the idea of a data center in our neighborhood. Beyond the fact that AI functions and processes are being injected into our lives non-consensually we as a community don't need to support it by building actual infrastructure for this resource sucking mistake. Don't listen to the black rock lackey. Listen to the people who live here. There are lots of ways to stop a building getting built. Let's do the easy route and stop this before it starts.

[EXTERNAL] NO to the "large load"

From Eden Hirsh <eden.hirsh@gmail.com>

Date Thu 9/17/2026 3:53 PM

To Public Comment <PublicComment@smud.org>

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 writing to submit a public comment against the building of a "large load" data center in district 6. Our current climate is being overridden and taken over by AI process. This is diluting our unique sense of community, something I thought SMUD was a supporter of. Stand for bringing people together and improving the environment we live in. The building of this will continue to push people away from each other and contribute to the destruction of the things that are necessary to our survival.

This is an extremely uncool move from a company I thought was pretty cool. Opinion officially changed. BOO SMUD!

[EXTERNAL] Large Load Data Center Public Comment

From Ori Briarton <oribriarton12@gmail.com>

Date Thu 9/17/2026 4:02 PM

To Public Comment <PublicComment@smud.org>

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.

Hello SMUD and Board,

I urge you to stop all advances on AI driven data centers or data stores for a myriad of reasons, chiefly above all; ecological impact on city grid infrastructure. We've seen time and time again that when the city gets hot, power goes out. While plans to build a solar farm next to it are cute at best, we need to consider the long term impacts on our environment. Oppose this plan, oppose AI infrastructure taking our natural resources away.

Keep Sacramento the City of Trees, not Black Rock City.

Ori

[EXTERNAL] Opposed to 'Large Load' Data Centers in my Neighborhood

From Cheryl Lemons <cheryl.a.lemons@gmail.com>

Date Thu 9/17/2026 4:12 PM

To Public Comment <PublicComment@smud.org>

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.

Good afternoon,

I am unable to attend in person today to express my deep concerns and disapproval to hear of large data centers being built in my neighborhood, however I do wish to express my concerns. While the Fruitridge Rd/ Depot Park area is industrial, it is also a neighborhood and community. I have owned a house in this area for over 7 years, and raising two young children in this area. They do not deserve to live in a dystopia where data centers are plaguing our neighborhood, and we suffer the consequences. I have such a deep respect for SMUD as a utility provider - in a state where many are forced to deal with PG&E and the unethical ways they treat their communities, I have always felt blessed to have SMUD, and have used the rebates available to convert my home exclusively to electricity to remove gas entirely. I rely on SMUD being an affordable option, and an ethical energy provider. The slick FAQ on your website about these plans glosses over how deeply unethical Blackrock is, and the complete lack of concern for our safety, communities, affordability, and peace. Whatever dream we're being sold now to get us to be complacent is a rug that will be torn from under us when we have no other choice or recourse. It pains me to think of living next door to a large data center, and the funds and resources that will be sucked from us in the process. I truly hope you listen to the community on this and our concerns. That is not a world I want to live in. Why do we have to worry about having the largest data center next to our community? Putting these projects in neighborhoods with economic disparity, instead of utilizing the vast amounts of rural space in the surrounding Sacramento region is a clear indication that our communities are not respected and our well being is not a concern.

It sounds like SMUD is going to get big paychecks from Link Logistics/ Blackrock to push this through, and at the end of it all, no matter how much you assure otherwise, we all know the outcome is going to be poor for us residents, and I hope SMUD doesn't care more about the money to upgrade infrastructure at the expense of this community that has such a positive view of them.

Sincerely,
Cheryl Lemons
Concerned Citizen & Homeowner

[EXTERNAL] Board meeting September 17, 2026 written comments

From John W <js_weber@hotmail.com>

Date Thu 9/17/2026 7:20 PM

To Public Comment <PublicComment@smud.org>

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.

Dear Chair and Board,

It appears the Board is in the dark with what the staff is doing regarding the new large load customer. I missed Tues and Weds meetings this week and hope to review them soon. It sounds like I might have missed something. The below I know is true without having reviewed those meetings.

The CEO correctly stated that SMUD has an "obligation to serve" which is correct.

SMUD **"Does not have an obligation to submit a \$122 million grant to the DOE for that large load customer."** This grant application **was completed in 6 weeks which is much faster than the normal time of 6 months according to SMUD's own employee.** This grant application took much staff time and effort to complete in such short time. Like other grant applications, it should have been voted on by the Board **before** it was submitted. Why did this happen without the Board being aware of it? SMUD's own survey results show that the majority of customers have a negative view of this type of customer. This is a transparency issue that needs to be put on the agenda for a future meeting so all the shareholders/customers can understand what happened.

I am still a SMUD super fan but this needs to be addressed. It is looking like Coyote Creek Part 2 at this time. The Board needs to know what the staff is doing.

Regards,
John Weber

SSS No. SERES 26-07

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date

Policy – 10/07/26

Board Meeting Date

October 15, 2026

TO				TO									
1.	Linda Wong			6.									
2.	Frankie McDermot			7.									
3.	Rhonda Staley-Brooks			8.									
4.	Brandy Bolden			9.	Legal								
5.	Suresh Kotha			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	
Emily Bacchini				Safety, Environmental and Real Estate Services				B209		6334		09/10/26	

NARRATIVE:

Requested Action: Accept the monitoring report for Strategic Direction SD-6, Safety Leadership.

Summary: Report on the status of Strategic Direction SD-6, Safety Leadership (SD-6), for safety performance from January through June of 2026. Report addresses safety leadership accomplishments during the first six months of the year, current Days Away Restricted Time (DART) numbers, and safety opportunities and challenges.

Board Policy: Strategic Direction SD-6, Safety Leadership
(Number & Title)

Benefits: Provide the scheduled bi-annual monitoring report as requested by the Board of Directors and Executive Office. The report provides an opportunity to make recommendations or policy revisions, as necessary.

Cost/Budgeted: Costs contained in budget for internal labor.

Alternatives: Provide via written report through the Chief Executive Officer and General Manager; schedule presentation for another date.

Affected Parties: Board of Directors, Executive Office

Coordination: Organization-wide

Presenter: Emily Bacchini, Director of Safety, Environmental and Real Estate Services

Additional Links:

SUBJECT

Monitoring Report – Strategic Direction SD-6, Safety Leadership

ITEM NO. (FOR LEGAL USE ONLY)

5

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: September 23, 2026

FROM: Linda Wong *LW 9/23/26*

**SUBJECT: Audit Report No. 28008034
Board Monitoring Report; SD-6: Safety Leadership**

Internal Audit Services (IAS) received the SD-6 *Safety Leadership* first-half 2026 Biannual Board Monitoring Report and performed the following:

- Selected a sample of statements and assertions in the report for review.
- Compared sample to the corresponding supporting documentation to identify potential discrepancies.

All items sampled within the SD Report aligns with the supporting documentation provided at the time of review.

CC:

Lora Anguay

Board Monitoring Report 1st and 2nd Quarters, 2026 Strategic Direction SD-6, Safety Leadership



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:

a) Workplace Safety

- i. Reduce SMUD's severe safety incidents to 0 by 2030, as measured by OSHA's Days Away Restricted Time (DART).
- ii. Provide timely, quality health care for injured employees that aids their recovery while maintaining positive financial performance of the workers' compensation program.

b) Contractor Safety

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

c) Public Safety

- i. Track and report incidents involving the public related to SMUD operations or facilities.
- ii. Implement measures to protect the public from injuries related to SMUD operations or facilities.

2. Executive Summary

SMUD is in compliance with SD-6 and is in alignment with SMUD's 5-year strategy of working toward a zero-incident culture. SMUD has experienced substantial reductions in both preventable vehicle accidents (PVAs) and serious injuries and fatalities (SIFs) over the years, culminating in zero SIFs reported in 2025. To sustain this positive trajectory, SMUD's five-year strategy to achieve zero DART incidents by 2030 will emphasize the systematic review of data obtained through supervisor interactions, SCORCH observations, and near-miss/good-catch reporting. These data sources will be used to identify leading indicators that enhance hazard recognition and guide the implementation of proactive measures aimed at keeping our employees safe.

Workplace Safety

SMUD continues to make meaningful progress toward its goal of zero severe incidents by 2030. During the first half of 2026, SMUD recorded 9 OSHA-recordable injuries, including 5 DART cases and 4 other recordable injuries. This represents a 50% decrease in total OSHA-recordable injuries compared with the same period in 2025, when 18 recordable injuries were reported. DART cases decreased by 29%, from 7 cases in the first half of 2025 to 5 cases in 2026.

This improvement may be attributed to increased supervisor-employee engagement, greater field presence, and more intentional safety conversations. As a result, SMUD's DART rate for the first half of 2026 was 0.44, this is 63% below the current industry average of 1.2.

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 indemnity benefits over the past five years as presented below, even as the number of claims increased.

Fiscal Year	2021	2022	2023	2024	2025
No. of Claims (Medical & Indemnity)	59	54	46	63	68
Incident rate per 100 employees	2.4	2.2	1.8	2	2.2
Rates per \$100 payroll	.85	.67	.58	.50	.40

Contractor Safety

SMUD continues to use International Suppliers Network (ISN) to evaluate safety records and performance for high-risk contractors and bidders. This evaluation 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. Currently SMUD has **189** contractors in the ISN system.

This year we have increased the number of site safety evaluations for high-risk contractors to validate safety performance on the jobsites. The 2026 goal is set at 500 contractor safety visits. Through Q1 & Q2 of 2026, the Contractor Safety Team completed **324** documented safety visits. These visits focus on SMUD contractors who work with Power Generation, Line, Substation, Facilities, Vegetation Management and Environmental Services on projects where high-risk work is performed. This work includes high voltage work, working at heights, vegetation management, confined spaces, excavations, etc. SMUD has onboarded two new Vegetation Line Clearance Contractors and focused audits have been completed by SMUD's Contractor Safety and Vegetation Management teams. The Safety Management System (SMS) is used for inspections, incident tracking, reporting and investigations of SMUD contractors. This allows SMUD to verify safe working practices by our contractors to reduce the potential for serious injuries or property damage. Contractor reported incidents require an investigation to be completed and typically warrant additional site safety visits to verify corrective measures have been put into place to reduce further occurrences.

The Contractor Safety Team continued its partnership with SMUD's Vegetation Management Team and participated in the three-day Contractor Safety Event. The ISN Training tool's use has been expanded with more Contractors being assigned the various trainings. This tool helps SMUD keep track and record of training completions. Lastly, in 2024 the Contractor Safety

Team piloted Contractor Check In meetings, with success and positive feedback. In 2026, the team made it a goal to bring back the meetings and by the end of Q2 have completed three of the five Contractor Check in meetings. These meetings bring a lot of value to SMUD as it allows various stakeholders to be present and communicate successes and areas of improvement to our Contractors.

Public and Community Safety

Public Safety Statistics

SMUD tracks public and community incidents in the Safety Incident Tracking System (SITS) involving car-pole, electrical contacts, dig-in incidents, and injuries to the public that are related to SMUD's operations or facilities. The following statistics are reported for the first two quarters of 2026:

- There were 124 incidents where the public struck a SMUD asset with a vehicle, with two fatalities from such events.
- There were six electrical contacts reported with four reported injuries from these contacts.
- There were 35 dig-in incidents reported with no injuries. In response to these dig-ins, SMUD's public safety team has sent out 8 notification letters to contractors and customers responsible for the dig-in occurrence as a proactive effort to provide further awareness and education on best practices to avoid future occurrences. No responses or escalations have been provided.

Public Safety Events

SMUD's Safety team has attended several local events within the SMUD territory in support of delivering public safety messages with a variety of partnerships. The Safety team has coordinated and participated in the following events so far for the 2026 calendar year:

- Downtown Network & Sacramento City Fire (SFD) Tour
- Elk Grove Regional Safety Day
- Deterding Elementary School Public Safety Day

New Public Safety Initiatives

The Public Safety team is partnering with other SMUD business units and outside public agencies to develop procedures for responding to lithium-ion battery related fires. Additionally, the team is developing and providing resources directly to local first responders to support knowledge and awareness around high-voltage lines to prevent electrical contacts by emergency response crews.

3. Additional Supporting Information

SD-6 was last updated in April of 2026. Our goal is to achieve the desired performance objectives by year-end 2030. This report summarizes safety performance in the first half of 2026.

Safety Leadership

The Safety Team continues with its integration efforts to support our 5-year strategy that emphasizes zero incidents and injuries and a focus on a zero-accident safety culture. SMUD's Executive Leadership team continues to emphasize our Safety priority with all personnel, contractors and in the public. We continue to grow our Safety for Life culture by reducing the risk of serious injuries and fatalities, targeting messages to staff on topics beyond work-related

risks, and looking for new ways to maintain engagement. These goals are outlined in SMUD's Safety Road Map.

Safety Management System (SMS)

During the first half of 2026, SMUD made significant progress in optimizing Benchmark Gensuite, the organization's Safety Management System (SMS). Ongoing projects and process improvements continue to increase system utilization, improve visibility, and enhance the overall effectiveness of safety processes across the organization. These efforts reflect SMUD's continued commitment to strengthening safety performance, improving operational efficiency, and supporting employee well-being.

From January through June 30, the Safety Team completed several high-impact initiatives that further strengthened the SMS. Customized workshops were developed and delivered to Substation staff to improve frontline employees' knowledge and confidence when using the application in the field. Enhancements to the Contractor Manager application were also completed, including a new log feature designed to improve documentation during site visits. Opportunities for additional enhancements have also been identified within the Incident, Measurements, and ACE Forms applications, with these projects scheduled to begin in Q3.

Safety Standards Development

The Safety Team is continuously reviewing and updating SMUD's Health & Safety Standards to support the organization's World Class Safety initiatives. The Core Standards Team has adopted a streamlined review routing process utilizing SharePoint. This approach has reduced the amount of time required from review to final signature. SMUD's Health and Safety Standards have also been incorporated into SMUD GPT.

The Core Standards Team continue to meet monthly to ensure progress is made and tracked. In 2026 the team plans to review twenty-eight standards, of which fourteen have been completed in the first half of the year.

The reviewed and updated standards included:

- Major updates to the Medical Practice Electric Shock Standard to include requirements per Justin Kropp Safety Act (AB 365)
- Minor updates to the Injury and Illness Protection Program (IIPP), IIPP Appendix B, Electrical Arc Flame Reduction, General Safety Rules, PPE, Wildfire Smoke, Powered Industrial Vehicle Standard, Serious Injury Fatality (SIF) Standard, Safety & Health Training, Dog Bite Prevention Program, Contractor Safety Standard, CPR& First Aid, and Hazard Communication.

Supervisor-Employee Interactions

The Safety Team continued to make significant progress in strengthening the Supervisor-Employee Interaction process throughout 2026. In the first half of 2026, 5,026 Supervisor-Employee Interactions have been completed that will count toward the Enterprise Performance Goal (EPG) of 8,440 interactions.

The Safety Team's focus areas in 2026 were diverse and tailored to the unique needs of each work environment. For office-based employees, efforts focused on reducing ergonomic risks and preventing slip, trip, and fall hazards. Hybrid and remote employees received personalized guidance to optimize workstation setups and minimize potential home-based hazards. In the field, leaders continued to strengthen safety through Eyes-on-Work interactions, emphasizing PPE compliance, safe equipment use, proper lifting techniques, situational awareness, and adherence to job briefings. These real-time observations provided opportunities to identify

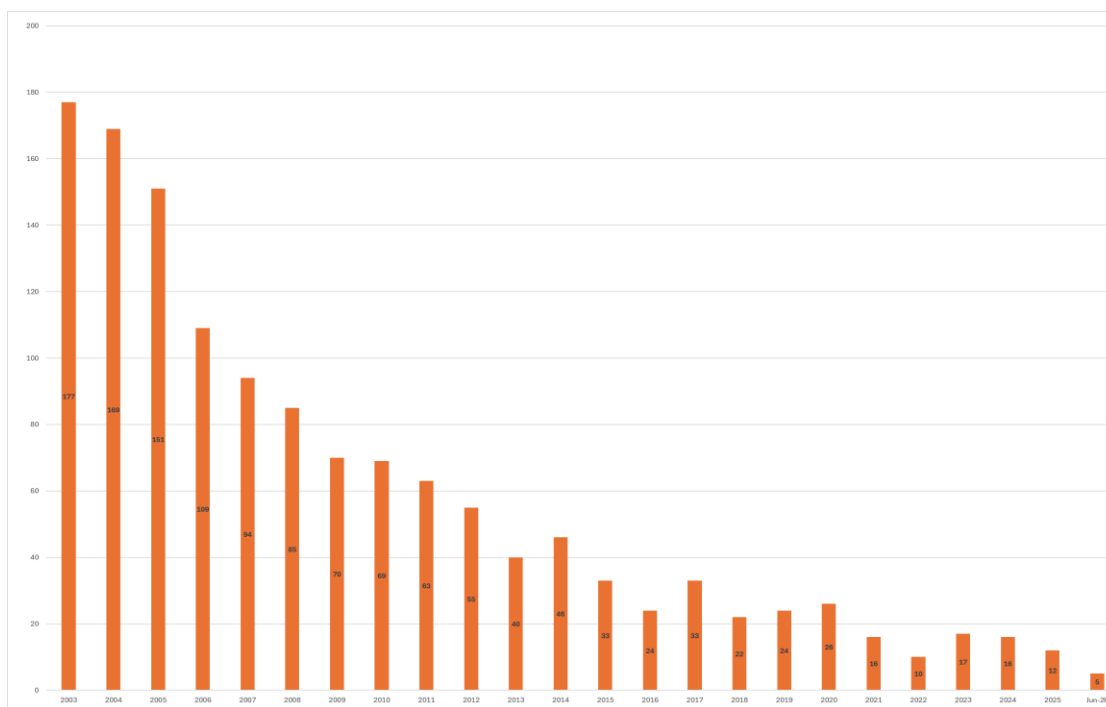
hazards early, reinforce safe behaviors, and address risks before they could result in an incident. Through these proactive measures and meaningful conversations, SMUD continues to build a strong, unified safety culture across all work environments.

Near Miss and Positive Observation/Good Catch Reporting

Leadership remains committed to fostering a proactive safety culture that encourages employees to report near misses and positive observations/good catches. This proactive approach provides opportunities to identify hazards, share lessons learned, and implement corrective actions before an incident occurs, ultimately strengthening safety performance and operational effectiveness. During the first half of 2026, 26 near miss and positive observation reports were captured in the SMS.

4. Challenges

After successfully meeting SMUD's 2025 target of 13 DARTs or fewer, we entered 2026 on a strong trajectory toward achieving this year's goal of 11 DARTs or fewer. However, the increase in DARTs at the end of Q2 and the start of Q3 brings SMUD to 9 DARTs year-to-date, and signals that we must further reinforce our safety programs and practice. The good news is that high-risk DART cases remain very low, and the time employees spend away from their regular work due to incidents is also staying low. This reflects strong hazard mitigation practices already in place, and it's important we continue to build on that momentum.



DART Count 2003-2026 (year to date)

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 - World Class Safety Program Improvements & Supporting Information

Safety for Life

Safety and Environmental Day will be held in October this year at Safety Center's Safetyville. The event is open to all SMUD employees and their families. There will be plenty of external vendors, and SMUD Trades groups sharing their crafts, like Line, and Substation, and a few more. SCORCH, the Green Team, Community Education, and Safety are hosting booths. There will be plenty of games and prizes as well and Game Day food truck.

To promote SMUD's safety for life culture, our safety team offered three internal CPR classes for SMUD employees. The first two were successful and we have one more scheduled in September.

Sparky's Crew continues to get SMUD families involved in safety by sending safety postcards and quarterly newsletters to the 150 children enrolled. Children enrolled also participate in the Sparky's Crew calendar submitting their safety drawings for a chance to be used in the SMUD's Safety for Life calendar.

Our Safety for Life communications continue. Safety for Life experiences from employees are being shared in our bi-weekly newsletter and resonate the most with employees resulting in the most readership.

Driver Safety

The driver safety initiatives are going strong this year. SMUD started the year with multiple Driving Roadeo events for groups in Energy Delivery & Operations, and across the organization, and have several more slated for the remainder of the year. Each is tailored to the needs of the group with consideration given to leading PVA causes to ensure optimal value is being delivered.

Additionally, SMUD attended an industry conference and expo in Q1, bringing back a number of potential solutions to aid in PVA reduction. These solutions have been thoroughly reviewed by Safety and the best options presented to the newly-formed All-Joint Labor/Management Safety Committee (JLMSC) Sub-Committee on PVA Prevention. Initial leadership interest and support was secured for at least one solution. This momentum is carrying on into the second half of the year as we look to launch a pilot of a data-driven solution, which better utilizes the data we are already collecting through our GPS system.

SMUD has trained 236 employees in Smith Defensive Driving, either as an initial course or a refresher. The Substations group has requested their refresher courses be conducted behind-the-wheel, rather than through LMS. This is being put into place and is a strong indicator of their commitment to vehicle safety. This effort will pay dividends for their staff.

The PVA review team continues to comb through the PVA cases to ensure high-quality investigation outcomes and identify any trending data. As this effort develops, findings are being shared back with safety reps and leadership to raise the bar for investigation quality. Trending data is captured, reviewed, and often shared during safety meetings or in Safety Alerts. This approach proved valuable when we started the year with six PVAs in the first few weeks and identified and communicated the trend. The PVA frequency dropped drastically after the communication went out.

Wildfire Smoke

SMUD did not experience any wildfire smoke events that impacted operations in the first or second quarter of 2026. The On-Call Safety Team held a tabletop exercise to ensure internal staff are ready to support the organization should an event occur.

Flame Resistant Clothing

All employees working on or near energized equipment receive an annual flame-resistant (FR) clothing allowance to ensure proper protection. SMUD partners with an FR vendor to provide clothing that complies with Arc Flash safety standards for SMUD equipment and incorporates the latest FR fabric technologies to enhance comfort in various weather conditions, such as storms, cold, rain, or heat. New electrical trades employees will undergo FR clothing training conducted by a Safety Representative, and they will be added to the FR clothing portal. They will also be informed about the proper care and maintenance of their FR clothing.

Field Ergonomics

SMUD's Field Industrial Ergonomics Program continues to advance through our partnership with Briotix Health, supporting employee wellbeing and contributing to a positive trend in reducing soft-tissue injuries. Staff spent six months working closely with Line at the Power Academy to establish consistent ergonomics practices and build the foundation for a sustainable stretch-and-flex program. We now provide this program bi-weekly both at SPA and Fresh Pond. Building on last year's foundational work, including job task assessments, ergonomic evaluations, and safety meetings, Briotix has expanded its engagement with employees through continued one-on-one evaluations, vehicle ergonomic assessments, and daily stretch sessions that prepare crews for safe movement and physical readiness.

A significant enhancement introduced this year is the new Pro Fit Program availability. Previously offered only on a scheduled, as needed basis, the program now features consistent drop-in hours every Tuesday and Thursday from 5:30 to 6:30 a.m. This accessibility allows field crews and participants to work directly with the Briotix consultant on strength and conditioning, flexibility, and range of motion, which are key components in preventing soft tissue injuries and promoting long-term physical fitness. Participation continues to grow, reflecting strong employee interest and the value of proactive injury prevention.

Monthly coordination meetings between SMUD and Briotix ensure alignment of priorities, deliverables, and opportunities for improvement. These ongoing efforts strengthen our field ergonomic strategy and reinforce SMUD's commitment to maintaining a proactive, supportive safety culture.

Joint Labor Management Safety Committees

Hydro JLMSC – The Lock Out/Tag Out (LOTO) Procedure committee was created to establish a task force responsible for creating LOTO procedures for all fixed equipment throughout Hydro's facilities. This is to ensure compliance with Cal OSHA regulations. The Fresh Pond Safety Fair was held in June and was another successful event bringing SMUD employees and their families together (173 in total) for a fun day of education and awareness pertaining to the industry, emergency services and the recreational opportunities we get to enjoy right in our own backyard.

Line Assets JLMSC – A variety of safety improvements are in progress or already completed through the Line Assets JLMSC. Key improvements to highlight are as follows. Safety partnered with the Toolroom to re-establish the tool committee, develop a flow chart for process, and a tool request form for evaluation. The Watson Hole digger truck was retrofitted with a Kelly Bar.

Staff scheduled demonstrations of newer/improved vacuum truck models that will eventually be purchased to supplement the current model. A subcommittee of line foremen, fleet, and line leadership will reassess and update the hurt man rescue protocol for three-day, including additional equipment, as the single-man bucket may not be effective during climbing school. Self-retracting lifeline (SRL) safety alert went out to all crews to advise on the proper use of and storage of SRLs.

Substation, Telecom, & Metering (STM) JLMSC – Current Near misses and Safety Alerts are shared at the beginning of the Quarterly JLMSC meetings to remain current on conditions, incidents, or accidents and possibly discuss solutions. The Committee continuously identifies and establishes new initiatives and focus areas are established to improve safety. Examples from Q1 and Q2 include the creation of a sub-committee on PVA prevention, with a focus on leadership participation and leveraging new technologies, and, separately, an assessment of noise hazards in Telecom indoor work locations. The equipment of concern in these locations is being evaluated and engineering controls applied where necessary. Additional items were worked on during Q1 and Q2 but are not yet complete. These will be shared in future updates as they are completed.

Safely Conducted Observations Reduce Common Hazards (SCORCH)

Observation Engagement & Behavior Trends

The Legal & Warehouse Operations (LWO) and Electrical Trades process combined to observe a total of 752 employees during the first half of 2026. The continued awareness for minimizing exposures by planning for success made **Communication** the top observed safe behavior for the Electrical Trades workgroups. Highlighting the value in which employees place on maintaining regular communication while performing job tasks to ensure everyone is cut in. Observation feedback showed improved consistency for Maintaining a **Safe Following Distance** of 4 seconds or higher when driving behind another vehicle, making it the top observed safe behavior for the LWO workgroups. Two great behaviors that aid our field employees in going home injury-free.

Opportunities for safety improvements were related to the at-risk behaviors of **Animals/insects** and **Vehicle Operations**. Employees found themselves accidentally disturbing or provoking wasp or bees and exposed to being stung while performing job tasks. Employees were encouraged to always have Bee Bopper spray stored in their trucks and use extra caution on hot weather days when moving material or operating equipment/vehicles that have been sitting idle for a long time and create the perfect environment for an active nest. To overcome the low perception of risk when it comes to operating SMUD vehicles, employees were reminded to always wear seatbelts even when driving around the SMUD campus. Risk Reduction Reminders campaigns were launched across all participating workgroups to enhance employee commitment to safety.

Throughout the first half of 2026, a total of 2,765 Office & Professional observations occurred. Employees continue to display ownership to maintain good **Head/Neck Posture** making it the top observed safe behavior. A routine cadence for sending out Risk Reduction Reminders and taking “micro stretch breaks” enable employees to log out with less aches and pains at the end of the day with sustained consistency.

The behavior of **Hips/Legs/Feet Posture** was logged as the top at-risk behavior. Employee feedback tells us that exposure is frequently tied to a low perception of risk. Staff set out to combat the employee mindset of “it feels comfortable to me, it’s a habit of mine or it’s just something I do without thought”. Step one was to raise awareness of the cumulative trauma and

stress placed on the tendons and/or joints along with its quality-of-life injury potential impact. Step two was to educate employees on chair controls for maintaining the proper seat pan depth and creating a “frequent movement” schedule to avoid sitting with legs crossed at the ankles or with a single leg tucked under the body for long amounts of time. Although the number of times the behavior is being marked at-risk has decreased, work remains to eliminate this exposure from our office work environment.

Safety for Life/Behavior Influencing Highlights

SCORCH team members who recently attended DEKRA’s National Safety in Action conference successfully shared key takeaways and best practices at its annual 2-day Mini Conference. Why We Take Risk, The Hidden Risk or Familiar Work and The Real Cost of Safety were a few of the presentation topics shared with employees. In continuation of its Eyes on Path, Making Every Step a Safe One campaign, SCORCH partnered with Facilities and Buildings & Grounds for placement of their newly received lawn flags. What started with the stenciling of Eyes on Path on walkways is now accompanied by flags and its first-ever iNet video. SCORCH is focused on making a sustained commitment to reducing the exposure for a potential incident or injury, by simply demonstrating Eyes on Path when walking around campus.

Heat Illness

SMUD continues to identify heat as one of the main hazards our employees face during the hot summer months. The end of the second quarter was volatile with mild temperatures followed by rapidly warming days. SMUD’s Tool Committee identified an electrolyte solution that meets SMUD’s needs. Additional resources are available to employees, including cooling towels, shade structures, water and ice. Pilots are currently underway for cooling vests.

Medical Monitoring

Safety continues to partner with 3rd Party Medical Monitoring vendors to ensure employees receive appropriate Cal/OSHA required monitoring. There were 3 onsite hearing events, 2 at ECOC and 1 at Fresh Pond. One hundred and ninety-nine employees completed their annual hearing exams during the three onsite events. The Safety team organized 3 onsite “pop-up clinics”, 1 at Fresh Pond and 2 at ECOC, for our medical surveillance vendor for monitoring other than hearing exams. Thirty-six employees had their annual medical exams completed during those three events. Safety will continue to ensure all employees are current on their medical monitoring.

Awards

American Public Power Association (APPA) Safety Award of Excellence

The American Public Power Association (APPA) recognized leading utilities across the country for their safe operating practices in 2025. SMUD earned the 2025 APPA Safety Award of Excellence, **Diamond Status**, for the second consecutive year.

Diamond Status is the highest level of recognition awarded by APPA and recognizes utilities that demonstrate an exceptional commitment to the safety and well-being of their employees, customers, and communities.

National Safety Council (NSC) Occupational Excellence Award

The National Safety Council (NSC) Occupational Excellence Award recognizes member organizations that demonstrate an outstanding commitment to workplace safety and superior safety performance relative to industry standards.

SMUD was recognized with this award for 2025, highlighting the organization's continued commitment to a strong safety culture, effective risk management, and proactive employee engagement in safety practices. This recognition reinforces SMUD's ongoing efforts to prevent incidents, strengthen employee engagement, and continuously improve workplace safety.

NWPPA Safety Award — Over 1,000,000 Hours of Exposure

At the 2026 Northwest Public Power Association (NWPPA) Safety Awards, utilities in the Over 1,000,000 Hours of Exposure category were recognized for outstanding safety performance based on their 2025 injury and illness incidence rates.

SMUD earned **Second Place** in this highly competitive category, recognizing its continued commitment to workplace safety and sustained safety performance.

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-6, Safety Leadership**, substantially in the form set forth in **Attachment ____** hereto and made a part hereof.

SSS No.

ZCES 26-009

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date

Policy – 10/07/26

Board Meeting Date

October 15, 2026

TO					TO								
1.	James Frasher				6.	Suresh Kotha							
2.	Linda Wong				7.								
3.	Joel Ledesma				8.								
4.	Rhonda Staley-Brooks				9.	Legal							
5.	Brandy Bolden				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	
James Frasher			Research and Development, Grants, and Partnerships					K221		6082		09/11/26	

NARRATIVE:

Requested Action:

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

Summary:

Report on the status of Strategic Direction SD-10, Innovation (SD-10), for performance from June 2025 through July 2026. Report addresses innovation and leadership accomplishments along with opportunities and headwinds.

Board Policy:

This report supports Strategic Direction SD-10, Innovation, by providing a performance status.

(Number & Title)

Benefits:

Provide the scheduled monitoring report as requested by the Board of Directors and Executive Office. The report provides an opportunity to make recommendations or policy revisions, as necessary.

Cost/Budgeted:

Costs contained in budget for internal labor.

Alternatives:

Provide via written report through the Chief Executive Officer and General Manager.

Affected Parties:

Board of Directors, Executive Office

Coordination:

Organization-wide

Presenter:

James Frasher, Director of Research and Development, Grants, and Partnerships

Additional Links:

SUBJECT	Monitoring Report – Strategic Direction SD-10, Innovation	ITEM NO. (FOR LEGAL USE ONLY)
		6

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: September 23, 2026

FROM: Linda Wong *LW 9/23/26*

**SUBJECT: Audit Report No. 28008035
Board Monitoring Report; SD-10: Innovation**

Internal Audit Services (IAS) received the SD-10 *Innovation* 2026 Annual Board Monitoring Report and performed the following:

- Selected a sample of statements and assertions in the report for review.
- Compared sample to the corresponding supporting documentation to identify potential discrepancies.

All items sampled within the SD Report aligns with the supporting documentation provided at the time of review.

CC:

Lora Anguay

Board Monitoring Report 2026

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 benefit our customers and community.

2) Executive Summary

To assure SMUD's long term competitiveness and delivery of the Clean Energy Vision, the Research & Development (R&D) team provides subject matter expertise, project planning and execution in support of SMUD's core and key values. R&D evaluates emerging technologies and business models and accelerates their integration into SMUD's operations in a way that balances risk and opportunity. The R&D portfolio contains both short term and multi-year projects focused on scaling load flexibility, facilitating electrification of buildings and transportation, and optimizing reliable grid assets and operations. We support SMUD through research, analysis, development and demonstration of emerging technologies that benefit our customers and community. Including the transition of vetted technologies into operations, and analysis of energy and climate change policies.

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.	28 active projects in 2026. 4 projects are completed as of July 1, 2026 ¹ .	This reflects a 12% increase in active projects and maintained a consistent rate of completed projects compared to the previous reporting period.
Risk	Technology risk assesses ability to meet expected performance goals. Implementation risk assesses the probability of deployment.	82% of projects are deemed low to medium-low technology risk. 79% 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.	75% of projects are in stages 4-5 ² . 89% are expected to provide benefits to SMUD or customers within 5 years.	The percentage of projects in stages 4-5 is consistent with 68% in 2025, reflects the addition of earlier stage technologies to the portfolio, with an eye toward delivery of benefits beyond 2030. The benefits time frame is consistent with the 2025 portfolio.

Table 1: SD Requirements Compliance

¹ Reporting metrics and achievements reflect the reporting period of July 1, 2025 – June 30, 2026.

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 innovation occurs throughout SMUD.

Electric Transportation (ET)

Transportation electrification advances SMUD's sustainability goals by reducing local emissions and petroleum use, improving air quality, and generating new revenue. SMUD is committed to increasing EV adoption and expanding charging access to serve a wider range of customers and use cases. At the same time, we are addressing grid impacts from EV charging through pricing incentives and remote charging management, investigating managed charging (V1G) and Vehicle-to-Grid (V2G) technologies to better understand their potential benefits and challenges.

Key Activities:

- After two years of engagement, the **REACH 1.0** multi-family housing partner determined the grant was no longer feasible and opted to cancel the grant. SMUD subsequently engaged the CEC in a 'wind-down' effort resulting in successful closure of the grant.
- Completed the **Residential Managed EV Charging Pilot**. Key learnings will be applied to improve effectiveness of the managed EV program design to achieve the goals of deferred distribution system upgrades, reducing renewable generation curtailment, and accessing import and export arbitrage opportunities.
- In 2025, SMUD successfully activated its **REACH 2.0 grant** to market and process EV charger rebates targeting multi-family sites in Disadvantaged Communities. Construction expected to end in Q1 2027 with full grant closeout expected by Q4 2027.
- With CEC match funding of \$2.4M, SMUD's **FAST Grant** began installing 13 stations (26 ports) at California State University, Sacramento and the Sacramento International Airport- locations chosen for their high on-demand transportation volume and easy access to transportation corridors. The FAST grant also developed a Minimum Viable Product for a SMUD-branded mobile app intended to enable charger access, activate sessions, and process payments across multiple charging networks via a single account.
- The **Light Duty V2G Demonstration Project** (in collaboration with Tokyo Electric Power Company) used a 2023 Nissan Leaf and Fermata FE-20 Charger to conduct operational, resiliency and API testing for Vehicle-to-Grid export. The charger effectively responded to price signals sent by SMUD, and safely shutdown during simulation of edge cases (like loss of power). Fermata's AI optimization program was able to respond to SMUD's hourly price signals via our Price Communication Application and control charging and discharging to leverage arbitrage value against the price signals.

Energy Efficiency (EE) & Electric Buildings (EB)

This portfolio optimizes energy delivery costs and balances infrastructure investments with demand growth via targeted, time-specific energy efficiency and building electrification. R&D explores emerging and underutilized technologies, working to lower barriers to technology adoption.

Key Achievements:

- The **panel upgrade mitigation demo** project has deployed ten SPAN 32 panels to support electrification of low-income customers' homes and avoid service upgrades.
- SMUD contracted with a vendor to develop the **RTU Engagement Tool for Small and Medium Businesses (SMB)**. The tool is now used by SMUD Strategic Account Advisors to help estimate bill impacts (including demand charges) of retrofitting rooftop HVAC units for SMB customers, improving customer decision-making and targeting.

DER Integration and Load Flexibility

This program portfolio supports cost-effective, reliable, and 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, improve grid asset utilization and reduce carbon emissions.

Key Achievements:

- **New Customer Technology Evaluation Process** - Coordinated technical review, installation standards, and staff training for various models of customer owned Meter Socket Adapters. The adapters are installed by SMUD Meter Technicians between the customer panel and utility meter, simplifying the electrical equipment and electrician labor for customer DER like PV, batteries, and electric vehicles. The Enphase IQ Meter Collar is the first formally approved product for installation behind the SMUD meter.
- **DER Interconnection Tool Enhancement** – The PRECISE DER settings tool was enhanced for usability and reliability to better support the Customer Interconnection process. Developers with the National Lab of the Rockies and end users within SMUD's Distribution Planning department collaborated through a series of user assessment and feature demonstration sessions. Together they identified and deployed improvements to the computation and presentation of results, resulting in greater confidence in the assignment of optimal PV inverter settings.
- Despite the Multifamily VPP project being canceled due to reduced federal subsidy for the technology, there were several key accomplishments during the planning of this project, notably as part of the interconnection process related to right-sizing telemetry requirements and clarifying operational plan requirements for battery systems located on constrained feeders.

Grid Technology & Reliability

R&D pursues innovative grid, storage, and generation solutions to facilitate SMUD's goal of zero carbon by increasing our technology options focused on improving reliability and affordability. Research results are aimed at providing flexibility in project options and understanding the conditions by which newer technologies, processes, and tools may be favorable compared to traditional solutions.

Key Achievements:

- Pilot of the ANYbotics robot dog for substation inspection continues in its second year. This tool is paired with substation inspection workers to perform daily tasks prioritizing infrared imaging, and partial discharge testing to look for early signs of trouble. We now

have 3 robots paired with 3 substation inspectors in the pilot. With inspectors trained and able to routinely program and commission new substations, the focus of the coming year will be to evaluate the business case of enhanced data collection. Potential use cases with other work groups within SMUD will also be explored.

- Concluded testing of the MEPPI lithium-ion battery, transitioned scheduled operations to DSO. Planning is currently underway to potentially use this battery to test grid forming inverters. Grid forming inverters could fill reliability gaps as our grid transitions from being dominated by synchronous generators to inverter-based resources.
- Expanded installation of the NextPower Vantage (formerly OnSight Owl) Computer Vision AI System to the Rancho Seco 2 solar generation site. This technology provides independent fire smoke detection which is useful for early detection of grass/brush fires that pose a risk to generation infrastructure due to proximity or pre-emptive thermal runaway detection for utility scale lithium-ion batteries. This technology, with real time monitoring, supplements traditional fire alarm systems.
- Continued monitoring of Advanced Transmission Technologies (ATTs) through participation in EPRI's Grid-Enhancing Technologies for a Smart Energy Transition (GET SET) project. In this Project, EPRI is conducting lab testing of advanced conductors and Dynamic Line Rating (DLR) to validate vendor claims and compare performance across common conditions. This builds upon SMUD's prior experience from small scale pilots with advanced conductor and DLR. Applying ATTs to existing transmission infrastructure is gaining attention since large loads are emerging at a faster pace than new (traditional) transmission projects can accommodate.

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 board direction to address climate vulnerabilities, partnering with our customers and community on mitigation opportunities and regenerative net positive projects.

Key Achievements:

- An update of SMUD's Climate Readiness Strategy is near conclusion, with an expanded vulnerability assessment, a recommended investment framework, and focused analysis on the UARP, Solano Wind Farm and extreme heat impacts.
- The Nature-Based Carbon and Biodiversity feasibility study is underway, including a regional assessment of opportunities to invest in land-based carbon storage on SMUD-owned and managed lands.
- The Carbon Farming and Ecosystem Service Research is a multi-year study aimed to restore California prairie and native pollinator habitat under PV panels in surrounding perimeter areas at Rancho Seco II. Composite soil testing of the Clay East hedgerow revealed a 9% increase in carbon matter and soil organic carbon since baseline testing two years ago, a much bigger increase than anticipated in the near term. Stewardship efforts continue with soil, pollinator and plant survival monitoring.

Enterprise-Wide Innovations

While SD-10 innovation goals are met within the R&D research portfolio, additional notable achievements occurred across SMUD.

- SMUD staff are implementing a new Outage Management System from AspenTech (Emerson) into our existing DERMS/ADMS deployment, which will allow for a shared network model, near real-time device and outage data exchange, coordinated switching and restoration, and DER visibility and control (at a later date). This module is expected to go live Q3 2026.
- Through July 30, 2026, SMUD has installed 198,918 Grid Edge Intelligence-enabled meters. These are the foundation for Distributed Intelligence applications (DI apps). Plan to deploy DI apps to all meters by the end of 2026. The seven DI apps being deployed so far include: High Impedance Detection, Active Temperature Monitoring, Location Awareness, Solar/PV Awareness, Active Transformer Load Monitoring, Active Transformer Voltage Monitoring, and EV Awareness.
- The SMUD Board approved the PPA for the solar array portion of the microgrid project being planned at Grant Union High School. Execution is awaiting a signed MOU with the Twin Rivers Unified School District.
- SMUD staff completed the feasibility assessment, draft design and engineering report for the Land Use & Climate Innovation agency's grant-funded Community Solar and Resiliency Project, which aims to understand and address extreme heat impacts through collaborative, community-centered planning to support deployment of clean energy solutions and community resilience strategies.
- SMUD GPT, an alternative to ChatGPT, so staff can research topics, summarize documents, and generate content while keeping data local to SMUD, has expanded to include around 100 custom models developed by SMUD staff. Across all these models within SMUD GPT, 1,524 unique users at SMUD have produced 58,088 conversations containing 204,208 messages.

Summary: As SMUD shifts an eye beyond implementation of the 2030 Zero Carbon Plan, R&D has ramped up support for bulk grid and load flexibility technologies and business models, focused on robotics and electric transportation, while continuing to advance research in climate change and technologies that enable building electrification. These innovations mitigate grid infrastructure investments, maintain customer choice and offer sustainable solutions toward a low carbon future. Our diverse portfolio maintains long-term competitiveness and balances risk with potential environmental and economic benefits, ensuring community benefits.

4) Challenges: Uncertainty of federal incentives, tariffs, supply chain lead times, and inflationary impacts all require careful navigation. Staff resources remain focused on providing subject matter expertise for efforts supporting sustainable operations beyond 2030, balanced between grant planning, acquisition and delivery to reduce SMUD's costs for R&D and project planning and implementation.

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

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Table 2: R&D Projects

Research Area (WBS)	ID	Project Name	Project Description	SD-10 Benefits	Start Date	End Date	Ward
Building Electrification	158	Smart Panel Cluster Pilot	This project will define, plan and implement a targeted pilot concentration of SPAN panels (up to 250), building upon the panel-constrained demonstration project to validate some of the assumptions presented in the E3 business model. The purpose of this pilot is to demonstrate the capability of SPAN Edge panels in residential customer's homes located on a shared distribution constraint to prevent panel, transformer, feeder, bank, or substation upgrades. The pilot will include parallel exploration of both Service Upgrade Avoidance through fixed limits (Firm Service Limits) at the panel and grouped Load Flexibility limits (Dynamic Service Limits) as methods to impact distribution constraints. The pilot will enable current and future electrification to take place while utilizing existing customer and grid infrastructure, maintaining reliability and deferring upgrade costs. The ideal customer is one who wishes to electrify some or all end-uses but has panel constraints and lives on the targeted feeder, however, all customers on the identified feeder will be approached to participate.	A clear quantification of the value to inform incentives and articulation of the value and recommended targeting for a load flex add-on whether as a standalone program or as a requirement of a smart panel adoption or incentive. (Distributed Energy Solutions and Distribution Planning & Operations) o Both departments need to be in agreement of how that's going to be used and continue to work together to identify opportunities. • Identify requirements needed to allow capacity constrained (at panel or transformer or feeder) customers that are installing a SPAN Edge panel to participate in DR/load shift programs. (Customer Interconnection) • Determine the value of load control of most single-family homes all on one feeder. (Distribution Operations and Planning) • Identify an alternative to like-for -like panel replacement when electrifying • Demonstrated load reduction to defer feeder, bank, substation upgrades due to local (at the home level) load curtailments/control. (DP&O) • Recommendations presented to stakeholders that lead to the creation of a scalable program • helping avoid a distribution grid constraint in the real world and then quantifying how did we do it and how can we do it more efficiently going forward • The target location is already at 100% loading, can we deploy this technology to keep it at or lower the load while enabling electrification in that same place.	6/12/2026	12/31/2027	All

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Building Electrification	154	End Use Value Assessment	This project involves developing a regional End-Use Value Assessment (EVA) tool as part of EPRI's Advanced Buildings & Communities program to evaluate the cost-benefit trade-offs of decarbonizing buildings through high-efficiency, electrified end-uses. Leveraging physics-based analysis and U.S. Department of Energy reference building models—primarily focusing on gas or fossil-fuel-powered systems for heating, water heating, and cooking—the EVA will identify functionally optimal, market-available electrification options tailored to specific building types and climate zones. The project aims to create a robust, user-friendly evaluation platform that enables stakeholders to make informed decarbonization decisions by providing regionally relevant insights into the economic and performance impacts of various electrification strategies. Deliverables will include the methodology, a validated assessment tool, supporting documentation, and illustrative case studies, all designed to accelerate building decarbonization efforts through data-driven analysis.	The project will deliver a validated, regional EVA tool that enables stakeholders to assess the economic and performance trade-offs of electrifying building end-uses, supporting more informed and cost-effective decarbonization decisions across diverse building types and climates.	4/27/2026	4/30/2027	All
Building Electrification	131	Panel Upgrade Mitigation Demo	The project team has installed SPAN 32 smart panel and along with end use electrification measures in 10 participants' homes. The project team and their contractors are currently collecting circuit level data for measurement and verification purposes. The project team is working with their internal partners to identify suitable candidates for the SPAN Edge and ABB Reliahome sub panels, with the expectation of completing installation by the end of 2026.	Single-family households face barriers to electrification due to the limitations of existing electrical systems, which often necessitate costly panel and service upgrades. This project aimed to assess various smart panel/breaker solutions through field research in homes in the Sacramento area to better understand the true costs, performance, and customer impacts. The expected outcomes of this project were a better understanding of: - Best practices for deciding when and where to deploy each panel mitigation strategy. - Identification of unforeseen barriers to smart panel/breaker technology. - Frequency of load nearing or reaching the service limit. - The technology readiness level of various manufacturers for mitigating service upgrades.	11/19/2024	12/31/2026	All

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Building Electrification	120	Home Infrastructure Planning Phase II (HIP II)	This project developed a Residential End State model to forecast the load shapes of 40,000 residential homes following full electrification. This data improves SMUD's ability to estimate the likely magnitude of impacts from residential electrification due to panel upgrades and distribution grid upgrades. Follow on efforts will include implementing the model on SMUD's servers and re-running the model with our full, single family residential population.	Better understanding of the infrastructure needs for fully electrified residences should help reduce the costs incurred by SMUD and our residential customers as they electrify their homes and vehicles. This will help to better plan infrastructure upgrades likely associated with customer electrification, helping to accelerate the decarbonization of residential homes.	5/1/2023	12/30/2025	District wide
Building Electrification	127	RTU Engagement Tool - Small, Medium Business (SMB)	The final version of the tool has been delivered to SMB team. A training session for the initial group of SAA's has been conducted. A follow up status evaluation will be conducted by the end of May 26'. The tool provides estimated bill impacts, including demand charges, for retrofitting roof top HVAC units at small and medium businesses to electric heat, information to assist in the decision to electrify equipment in commercial facilities.	The customer engagement tool will enhance SMUD strategic account advisors' (SAAs') ability to target and encourage customer electrification by providing precise, customer-specific analysis of the realistic impacts on each customer's bill. This will allow customers to make informed decisions about electrification, which will lead to accelerated decarbonization, with associated energy savings, and overall emission reductions. It will also allow facility staff to enter equipment and other information to refine and improve cost estimates if they so choose.	8/30/2024	4/30/2026	District wide
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 operational costs associated with vegetation management, expand pollinator habitat and improve soil health and carbon storage. The project is tracking plant survival using a specific thick mulch technique, in addition to pollinator presence 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
Electric Transportation	107	ESB V2G Demonstration	This project will build off learnings from the electric school bus project with Twin Rivers Unified School District. The project will demonstrate and test Vehicle to Grid (V2X) functionality with electric school buses.	Reduce grid impacts, reduced customer infrastructure build-out cost, wholesale energy or capacity cost avoidance, and mirror characteristics of stationary storage using V2G.	6/1/2026	12/31/2028	District wide
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	12/31/2026	District wide
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 realized include showing that managed charging with telematics can effectively cut the secondary peak caused by our TOU and EV rates. The managed charging helped spread out charging evenly during the EV rate's incentive hours, from midnight to 6 a.m. Also, valuable lessons were gained from the pilot that shaped our program design. For example, targeting customers on grid areas with capacity limits will deliver the best value.	10/1/2021	12/31/2025	District wide

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Electric Transportation	133	FAST Grant Implementation	Sacramento Municipal Utility District (SMUD), in partnership with Sacramento International Airport (SMF), California State University, Sacramento (CSUS), and ChargerHelp! (CH!), are deploying Direct Current Fast Charging stations (DCFCs) at two locations in Sacramento. With CEC match funding, this project will support the deployment of three fast charging hubs, with a total of 15 stations and 30 ports, strategically located in optimum locations with high on-demand transportation volume, near multi-family housing properties, and with quick and easy access to main transportation corridors. SMUD is currently developing a mobile app, integrated with an e-Roaming platform, to enable convenient access to locate chargers, activate sessions, and pay for charging across multiple charging networks through a single account.	Increase EV adoption by delivering electric mobility solutions throughout transportation corridors, promoting electric transportation as a benefit for drivers while lowering charging costs to increase access to electric vehicle (EV) charging for ride-share drivers, food delivery drivers, rental car fleets, shared mobility services, and residents	4/23/2024	3/30/2028	All
Electric Transportation	130	Smart Outlet Evaluation	SMUD staff evaluated three smart outlet products to gain first-hand knowledge and experience with their performance. This will influence programmatic policies and direction and allows program managers directly involved in consulting with customers or performing direct installations of chargers to evaluate these products and influence the market toward adoption of suitable technology.	Smart outlets promise advantages over traditional corded Electric Vehicle Charging Station (EVCS), including lower initial cost, simpler installation, lower physical profile, lower maintenance costs, and reduced maintenance burden for site hosts.	11/1/2024	9/30/2025	All
Electric Transportation	104	Light Duty Fleet V2G	This project tested and demonstrated V2X functionality on campus with two Nissan Leaf's and Fermata chargers. In partnership with TEPCO (Tokyo Electric Power Company) we evaluated the interconnection process, installation requirements, and V2X functionality. Furthermore, we explored the V2X optimization systems using the simple price API from both Virtual Peaker and Fermata. This demonstration and evaluation helped us discover issues and gain insights into V2X in a very low risk environment. This research helped inform a potential V2X pilot in the future.	Informed deployment of light-duty V2X reduces grid impacts and customer infrastructure build-out costs. LDV fleet management also offers wholesale energy or capacity cost avoidance, and mirror characteristics of stationary storage.	1/1/2022	7/31/2025	District wide

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Electric Transportation	125	EPRI EVs2Scale2030	The “EVs2Scale2030” initiative is a three-year project focused on leveraging the scale of the utility industry to help galvanize and align all market stakeholders as electric vehicles are deployed at scale and as EV goals increasingly target 50% EV market share by 2030. The initiative will focus on what needs to be done over the next 7 years to reach the 2030 goals. EPRI plans to broadly collaborate with utilities, vehicle manufacturers, charging providers, industry experts, trade associations, consumer groups, civil society, federal agencies and labs to support the rapid deployment and charging of millions of electric vehicles – while minimizing grid impacts and enabling critical grid benefits.	Key deliverable from EVs2Scale were: The Vetted Product List (VPL) - the nation's most transparent and comprehensive resource for industry stakeholders that evaluates electric vehicle supply equipment against consensus based industry criteria and the National EV Infrastructure Standards (NEVI) issued by the U.S. Department of Transportation and the Federal Highway Administration in an effort to simplify the complex landscape of EV charging equipment for vendors and users of EV charging equipment alike. Over 100 EV vendors and nearly 800 EV chargers have been vetted for adherence to industry standards to date. eRoadMAP - a first-of-its-kind interactive, online tool for understanding where, when, and how much EV charging load is likely to materialize on the U.S. electric grid. eRoadMAP allows users to explore how quickly electric vehicles are expected in different regions and identifies the energy needs at roughly the individual feeder level where critical utility planning occurs. eRoadMAP is a free and public resource highlighting both immediate and future charging needs. GridFAST - a secure information exchange platform that helps businesses and other organizations engage early and efficiently with utilities across the U.S. to accelerate the energization of electric vehicle (EV) charging projects. It also helps improve transparency in EV charging planning to better inform grid investments to support transportation electrification at scale. GridREADY guide - A 50-state resource for proactive grid planning. GridREADY is a data-driven resource designed to align stakeholders around the urgent need for early, coordinated grid planning to support the growing demand from electric vehicle (EV) adoption. Leveraging EPRI's eRoadMAP as its foundational data source, GridREADY offers a consistent, nationwide view of where and when grid investments are needed—helping ensure that no state and no community is left behind in the transition to transportation electrification.	7/14/2022	12/31/2026	District wide
Energy Storage	144	HBS1 Grid Forming Upgrade	The project involves staged testing of grid-forming (GFM) inverters in 3 parts: 1) Desktop PSCAD modeling of a hypothetical GFM upgrade to Hedge BESS (HBS1); 2) Hardware in Loop testing of actual inverter and power plant controllers after upgrade. 3) Field implementation of upgrade inverter and power plant controllers.	Safety & Reliability - Portfolio inclusion and configuration of Grid Forming Inverters (GFM) will help maintain Bulk Electric System (BES) reliability (at the transmission level) with a growing contribution of inverter-based renewable generation.	2/3/2025	6/30/2028	All

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Energy Storage	146	EPRI deRisked Supplemental	The update for this month is the following: * In an effort to align its product development with market and customer needs, Qnetic meet with deRisked participants to solicit unvarnished feedback on gaps, areas for improvement this was done through office hours that EPRI hosted last month. * EPRI is currently developing a data intake and processing workflow that will allow them to more directly and efficiently compare performance across different technologies and products. * EPRI is planning to set up a dedicated page on Storagewiki to share analyses as they are completed.	The primary benefit of this supplemental project is to evaluate current industry best practices and identify strategies that can be effectively adapted and implemented at SMUD where appropriate. The insights gained will support informed decision-making, foster operational improvements, and enhance organizational capabilities. Where applicable, the resulting recommendations will be deployed on a district-wide basis to promote consistency, improve efficiency, and advance SMUD's strategic objectives.	7/22/2025	12/31/2028	All
Energy Storage	122	Hedge 4 MW/8MWh Monitoring and Maintenance	Operation of a 4 MW / 8 MWh utility-scale storage battery to test different operational modes and grid interactions. Originally planned to move as a Power Generation managed asset in 2027. Transfer delayed supporting potential testing with the GFM project, to approximately 2028.	The operation and testing of the Hedge Lithium-ion battery will inform the installation and direction of SMUD's future battery projects as they ramp up to meet the 2030 plan of ~3000MW of renewables and storage.	1/20/2024	1/19/2029	3
Energy Storage	138	EPRI Phase 3 Fire Protection & Mitigation	Develop an Emergency Response Plan for the Hedge Lithium-Ion battery and perform tabletop drills for SMUD personnel and first responders.	Better understand the requirements for safety and reliability for utility scale batteries. Develop resources to train SMUD stakeholders and first responders to understand lithium-ion battery storage fire hazards and response for existing and future battery systems.	3/3/2025	12/31/2026	3
Generation and Sequestration	156	XPOSE	During Q2-2026, the XPOSE project team made significant progress on core deliverables. Key activities included the ongoing development, testing, and validation of the walkdown visual inspection guidance, as well as the concurrent development and testing of the AI-assisted device discovery tool. In parallel, the team continued wireless threat characterization and initiated planning for inverter exposure characterization. To support these efforts, additional field walkdowns were scheduled to provide more on-the-ground validation opportunities.	The benefits of this supplemental project are to gain insight into current industry practices and identify proven strategies that can be adapted and implemented at SMUD where appropriate. The knowledge and best practices obtained through this project will help support informed decision-making, improve operational efficiency, and drive innovation across the organization. Where applicable, the resulting strategies will be implemented on a district-wide basis to promote consistency, enhance performance, and support SMUD's long-term strategic objectives.	7/1/2025	7/3/2028	All

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Grid Evolution	139	Grant Union High School Solar+Battery Microgrid Project	The purpose of this project is to design and develop a Solar + Battery Microgrid at Grant Union High School within TRUSD that can serve as a Red Cross emergency shelter during disasters and prolonged outages, while also providing clean energy during normal operations and serving as a scalable model for future public-facility microgrids	Deploy a first-of-its-kind microgrid to demonstrate how a microgrid can provide additional benefits beyond emergency shelters by using SMUD's SolarShares and Commercial VPP programs. Serve as a template for future school installations.	6/2/2025	12/30/2027	5
Grid Evolution	136	ANYbotics Robot Assisted Inspection	Improve issue identification for preventative maintenance to reduce unexpected failures in operation and significant cost to failure of preventative maintenance. There are 4 employees dedicated to monitoring 264 substations every month, this technology will aid existing inspection staff. This will increase data collection and accuracy through robot assistance with manual and autonomous missions.	This technology will supplement the substation walkdowns done by substation operators. As the substation operator is conducting their inspection routine, the robot will aid in identifying smaller failures that are not noticeable by the human eye until it becomes a bigger failure. Being able to catch failures earlier can help minimize cost and risk.	5/28/2025	5/27/2028	3
Grid Evolution	132	NextPower Vantage AI Fire Detection System	This technology serves as an alternate means of fire smoke detection at or near a generation facility, that supplements traditional fire detection and alarming. As soon as something abnormal is spotted or sensed by AI analysis of the camera feed, such as smoke or a rapid/significant increase in temperature above our threshold, the Vantage sends out text message and email alerts within seconds. Additionally, there is a real-time monitoring dashboard which allows us to view the facility being monitored.	This technology provides independent fire smoke detection which is useful for early detection of grass/brush fires that pose a risk to generation infrastructure due to proximity or pre-emptive thermal runaway detection for utility scale lithium-ion batteries.	11/1/2024	10/31/2027	3
Grid Evolution	155	EPRI GETSET	During this reporting period, the EPRI research team delivered a presentation detailing the results of their laboratory testing activities for Dynamic Line Ratings (DLR) and Advanced Power Flow Control (APFC). The presentation covered the testing protocols used and shared preliminary data on device accuracy and reliability under controlled conditions.	Participation in this EPRI Supplemental project allows SMUD to continue monitoring Advanced Transmission Technologies, which may have applications to support adding large loads faster than traditional transmission infrastructure projects can accommodate.	9/30/2025	12/31/2027	All
Load Flexibility	153	Flexible Service Connections	This demonstration project aims to study the technical capabilities, integration process, administrative feasibility, and customer appetite for dynamic service connections. The demonstration plans to enroll up to five (5) high EV charging load customers (under 4 MW) whose initial load request can't be fulfilled without a timely and costly infrastructure project or who are amenable to begin operations with less than their final capacity.	Accelerate customer energization timelines for operation by allowing fleets to access a time-varying amount of capacity, as determined by SMUD, without increasing system capacity to meet charging needs	3/23/2026	12/31/2028	All

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Load Flexibility	148	CSR Microgrid Project	The Extreme Heat & Climate Resilience (EHCR) grant-funded Community Solar and Resiliency Project (CSR) is a multifaceted initiative aimed at understanding and addressing extreme heat impacts through collaborative, community-centered planning to support the deployment of innovative clean energy solutions and community resilience strategies. SMUD's role focus on extreme heat assessments and research and energy resilience design and engineering.	The long-term benefits to SMUD include a stronger partnership between SCUSD and SMUD and the development of a microgrid modeling tool to simulate system performance under various scenarios.	6/2/2025	5/31/2027	6
Load Flexibility	135	New Customer Technology Evaluation Process	Provide technical review of Meter Socket Adapters which allow the customer the ability to potentially avoid panel upgrades from PV/Battery installation via an adapter that interconnects between the utility meter and the customer main panel. Currently, Tesla/ConnectDER/SPAN MSAs are being evaluated via the New Tech Process.	•Potentially allows customer to avoid panel upgrades from installation of PV/EV •Increase adoption and penetration of DER •Improve overall customer satisfaction and experience	6/26/2025	12/31/2025	All
Load Flexibility	134	PRECISE DER Interconnection Tool Enhancements	Add enhancements to Precise for battery, solar+battery and battery add-on applications for residential customers. Also develop future enhancements to Precise such as Large-Scale DER, Flexible and Limited Generation Profiles LGP, EV Charging Stations, and V2H/V2G. The results of the enhancements will significantly reduce the labor hours of every engineer's time. In addition, it will maximize the benefit of each asset.	Increase safety and avoid reprogramming of advanced inverters post-install, and minimize curtailment. Deploying the tool in a real utility environment would advance chances of commercialization of PRECISE and revenues to SMUD. Save an estimated 45 minutes per interconnection application, approximately 600 engineering hours annually. Reduce labor demands, enabling engineers to focus on more complex tasks without adding staff. Expedite turn-around on customer interconnection applications. Increase DER Hosting Capacity on SMUD's grid.	1/1/2025	12/31/2027	All
Load Flexibility	89	Smart Inverters	This project tested smart inverter connection via two pathways: direct connection and through vendors/aggregators. Direct connection was done to assist in development of the DERMS, while the vendor/aggregator pathway explored real world implementation of the protocol and leveraging OEM and aggregator relationships to establish pilot access agreements to a broader range of smart inverters.	Smart inverters are new technology that allow SMUD to monitor residential PV and storage and provides control functionality to assist in grid support. Ensuring that IEEE 2030.5-CSIP is a reliable communication protocol helps open up this communications pathway for many devices.	7/1/2021	7/31/2025	All

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Load Flexibility	126	Multi-Family VPP	This demonstration aims to install 108 battery plus solar systems behind the meter in 108 tenant apartment units at the Chesapeake Commons multifamily complex. The goals are to identify how this model can scale into a commercial program, if the combined battery management system and utility dispatch control can ensure that peak loads are maintained or lowered, and to understand the distribution grid benefits of co-located BESS assets vs distributed installations.	The project benefited SMUD by strengthening its ability to design scalable, customer-friendly multifamily battery storage programs. It highlighted that multifamily installations needed to be treated differently from single-family homes, particularly in distribution capacity, interconnection processing, and operational control. It also identified cost-effective telemetry alternatives to SCADA, opportunities to simplify interconnection through one application per building or transformer, and the need to clearly distinguish between operational and interconnection contracts. In addition, it showed that SMUD's program guidelines needed to be updated to clearly reflect UL1742-SB certification requirements. From an operational standpoint, the work benefited SMUD by establishing a framework for scheduling and controlling batteries on constrained feeders, with Distribution Planning setting default operating parameters, Distribution System Operations retaining override authority, and Energy Trading and Contracts using remaining capacity where available. This structure improved reliability, supported grid flexibility, and helped reconcile distribution needs with broader asset value. Overall, these benefits supported a more equitable, efficient, and scalable deployment of multifamily BESS while improving customer experience, internal process efficiency, and grid reliability.	8/1/2025	1/31/2026	2
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Table 3: Enterprise-Wide Initiatives

Initiative Name	Initiative Description	Initiative Benefits	Start Date	End Date	Ward
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 flexible 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
SMUD GPT	SMUD GPT is a locally hosted alternative to ChatGPT. It allows staff to summarize documents, research topics, and generate new content while keeping all data local to SMUD.	As of June 30, SMUD GPT had 365 active weekly users, creating 1,190 conversations per week. Use cases are varied, including code generation, technical troubleshooting, research, training content development	2025	N/A	All
Gridscope	SMUD initiated a 3-year pilot project with Gridware, to install about 500 "Gridscope" devices on our transmission and distribution poles in the Upper American River Project (UARP) and in our service area, targeting distribution circuits with high fire risk, high number of outages, and a high percentage of outages with unknown cause.	The purpose of these solar-powered monitoring devices is to detect early signs of potential hazards like vibrations from car-pole incidents, bird strikes, fallen tree limbs, wind damage and downed wires. This allows for more rapid identification of outage cause and damage location, speeding restoration and allowing more targeted preventive measures.	2025	2027	2,3 ,4, 5,7
Transformer Health Monitoring Sensors	Deploy real-time monitoring sensors on substation transformers to continuously track transformer health, detect emerging issues early, and provide data for operations, maintenance, and future capital planning.	By collecting real-time data for a transformer, we can detect changes early, monitor performance under stress and make better decisions about maintenance, operations and long-term capital planning. Whether it's deferring replacements, increasing monitoring or scheduling repairs before failures occur, this proactive approach supports our long-term commitment to grid reliability and affordability.	2026	2031	All

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Grid Edge Intelligence	As of July 30, 2026, SMUD has installed 198,918 Grid Edge Intelligence-enabled meters. These are the foundation for Distributed Intelligence applications (DI apps).	The seven DI apps deployed so far include: • <i>High Impedance Detection</i> – Detects and locates poor electrical (high impedance) connections in low voltage secondaries • <i>Active Temperature Monitoring</i> – Uses high-resolution temperature readings to detect meter socket problems before they create a safety hazard • <i>Location Awareness</i> – Accurately determines electrical connectivity of every next-gen Riva meter on the grid (i.e., transformer, phase, and feeder/bank) • <i>Solar/PV Awareness</i> – Provides real-time output for solar power with magnitude of solar generation at the premise in kW on a continuous basis (every 15-min). • ATXM includes <i>Active Transformer Load Monitoring</i> – Near real-time monitoring of distribution transformer with DI-capable revenue meters (e.g. overload, power factor, reverse power flow) and <i>Active Transformer Voltage Monitoring</i> – Near real-time monitoring of voltage on all service points connected to a distribution transformer • <i>Brownfield</i> – tested and validated functionality with mix of new Itron RIVA meters and legacy Landis+Gyr meters on the same transformer • <i>Greenfield validated and in deployment</i> • <i>EV Awareness</i> – Provides near-real-time (i.e., 5-minute timestep) disaggregation information for when an electric vehicle begins or stops charging	2024	2028	All
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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-10, Innovation**, substantially in the form set forth in **Attachment ____** hereto and made a part hereof.

SSS No.
ZCES 26-010

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Policy – 10/07/26
Board Meeting Date
October 15, 2026

TO				TO			
1.	James Frasher			6.	Suresh Kotha		
2.	Linda Wong			7.			
3.	Joel Ledesma			8.			
4.	Rhonda Staley-Brooks			9.	Legal		
5.	Brandy Bolden			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.	
James Frasher		Research and Development, Grants, and Partnerships		K221		6082	
						DATE SENT	
						09/11/26	

NARRATIVE:

Requested Action: Accept the monitoring report for Strategic Direction SD-19, Diversified Business.

Summary: Report on the status of Strategic Direction SD-19, Diversified Business (SD-19), for performance from June 2025 through July 2026. Report addresses innovation and leadership accomplishments along with opportunities and headwinds.

Board Policy: This report supports Strategic Direction SD-19, Diversified Business, by providing a performance status.
(Number & Title)

Benefits: Provide the scheduled monitoring report as requested by the Board of Directors and Executive Office. The report provides an opportunity to make recommendations or policy revisions, as necessary.

Cost/Budgeted: Contained in budget for internal labor.

Alternatives: Provide via written report through the Chief Executive Officer and General Manager.

Affected Parties: Board of Directors, Executive Office

Coordination: Organization-wide

Presenter: James Frasher, Director of Research and Development, Grants, and Partnerships

Additional Links:

SUBJECT	Monitoring Report – Strategic Direction SD-19, Diversified Business	ITEM NO. (FOR LEGAL USE ONLY)
		7

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

OFFICE MEMORANDUM

TO: Board of Directors

DATE: September 23, 2026

FROM: Linda Wong *LW 9/23/26*

**SUBJECT: Audit Report No. 28008036
Board Monitoring Report; SD-19: Diversified Business**

Internal Audit Services (IAS) received the SD-19 *Diversified Business* 2025 Annual Board Monitoring Report and performed the following:

- Selected a sample of statements and assertions in the report for review.
- Compared sample to the corresponding supporting documentation to identify potential discrepancies.

All items sampled within the SD Report align with the supporting documentation provided at the time of review.

CC:

Lora Anguay



Board Monitoring Report 2025 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) The 2030 Zero Carbon Plan has positioned SMUD as a leader in the utility industry. The Diversified Business portfolio utilizes that leadership position to build revenue generating partnerships with technology developers, pursue external funding (grants) to support innovation and partnership, enable technology solutions to become fully commercialized through real world pilots and demonstrations, and expand regional access to green careers.
- b) **SMUD is in compliance with SD-19, Diversified Business.**
- c) Eliminating the final 10% of emissions from SMUD's energy supply requires the development of new technology and business models.

- d) The Grants Team manages or monitors 11 active competitively won grants (both State and Federal awards) totaling \$240M in total project costs and \$94M in award. The Grants Team supports SD-19 with grants that offset planned work or strategically introduce complimentary new work. In all cases, the pursuit and management of grants is a net financial positive to SMUD and represents a renewable and diverse funding stream.

External Funding (2025)

Total Project Cost	Award Amount	SMUD Cost Share
\$239,615,960	\$93,893,376	\$145,722,583

- e) New Business Development continues to develop leads for new strategic partnerships by providing initial review, collaborating with operational teams, and evaluating and establishing the more promising opportunities that fit strategic and operational needs. In 2025, traction developed for promising partnerships including Peak Energy and ANYbotics – both of which are expected to become part of SMUD’s Strategic Partnerships portfolio in the future. Moving forward, the NBD team is refining its process and goals to focus on opportunities that provide maximum regional economic impact and those that bring the potential for considerable new revenue to SMUD.

Partnership benefits to SMUD may include revenue sharing agreements, intellectual property development, future pricing commitments, service-based payments and/or partner commitments to regional investment. Partners benefit from SMUDs zero carbon leadership, subject matter expertise and collaboration on real world pilots and full-scale demonstrations.

Portfolio Revenue

Gross Revenue*	Costs	Net Revenue
\$21,928,519	\$16,119,464	\$5,809,055

*Partnership revenue may include revenue sharing agreements, intellectual property royalties, and/or service-based payments. Future product discounts, stock warrant value, and other unrealized benefits are not accounted for as revenue.

Strategic Partners and Revenue Generating Relationships

Partner	Area of Focus
Emerson (Formerly AspenTech, OSI Inc.)	ADMS / DERMS
ESS Inc.	Long Duration Energy Storage
Cal EPIC (Formerly California Mobility Center)	Mobility Innovation and Workforce Development
Itron	Smart meter and customer data platform
Simple Energy (Uplight)	Customer engagement and load flexibility
Smart Energy Water (SEW)	Customer Experience Platform Development
Community Energy Services	Operational support and consulting services for community choice aggregators

- f) Coming into focus is SMUD's leadership for battery manufacturing and regional economic growth: SMUD is well-positioned to lead a regional battery manufacturing initiative that can stimulate long-term economic development. As renewable energy sources like wind and solar continue to decline in cost and advancements in Long Duration Energy Storage (LDES) accelerate, utility-scale deployment will be essential for reliable, cost-effective power.

Our approach focuses on building strategic partnerships with community stakeholders, industry innovators, and manufacturers to create a collaborative ecosystem. Leveraging SMUD's assets and expertise, this initiative aims to attract investments, generate quality jobs, and support regional economic growth while advancing our clean energy objectives. This model ensures mutual benefits: community job creation and sustainable energy benefits, alongside market opportunities for manufacturers.

Our real-time deployment capabilities — including the rare Hedge training facility with direct grid connections and real-world testing environments — provide manufacturers with unparalleled resources. This competitive advantage strengthens our region's appeal as a hub for cutting-edge energy storage development.

In 2025, SMUD built strategic partnerships with leading battery technology companies and other innovators to support shared goals around advancing new technologies and strengthening the local economy. With LiCAP and Sepion already operating in the region, these collaborations are contributing to job growth and expanding advanced manufacturing capabilities in the Sacramento area, creating a solid foundation for long-term economic opportunity.

Companies	Manufacturing Technology
Seption Technologies	Lithium-metal Battery Separators
SPARKZ	Battery Cathode
LiCAP	Battery Electrode
Peak Energy	Sodium-ion Battery
Qnetic Energy	Flywheel Battery
CHAEVI	Electric Vehicle Charging
Princeton NuEnergy	Lithium-ion Battery Recycling

3) Additional Supporting Information

a) Additional Funding

Funding is most often pursued through grants; however, this category is not limited to grants. SMUD considers foundation funding, disaster recovery funds, state and federal funding allocations and other sources of funding in this category. Descriptions of a selection of grants are listed in Appendix A.

b) Community Energy Services

SMUD currently provides 12 specific services to nine (9) community choice aggregators representing 2.8M meters. SMUD has, on average, added approximately one new CCA client and one new service launch per year. Specific details on these CCA's are listed in Appendix B.

c) Technology and Industry Partners

Diversified business is often an outcome of technology and industry partnerships. These relationships often build on the successes of individual pilots, projects, or other innovation initiatives. Specific details of projects and innovation are outlined in the SD-10, Innovation monitoring report. Additional strategic partnership details are included in Appendix C of this report.

4) Challenges

- a) In 2025, SMUD's grant efforts experienced significant upheaval at the federal level directly related to the changing priorities of a new presidential administration. Despite these challenges, SMUD was able to secure an additional \$69M in total project cost for the CERRI grant- a dual federal and state grant product that offsets the cost of network protector and underground cable installation. Overall, the Grants Team approach to changing federal priorities and processes is to remain adaptable and pivot when needed.
- b) SMUD's leadership position in pushing towards zero carbon has created a significant number of potential opportunities and partnerships to consider. The prevalence of funding opportunities and the volume of companies with a

desire to work with SMUD create challenges in filtering through the volume of opportunities in pursuit of the best opportunities. Strategic partnerships are often made more complex because they often involve technologies that are not fully commercialized or market ready. Developing the correct portfolio of grants and partnerships is critical to meeting the goal and intent of SD-19. Pursuing too many initiatives in parallel can result in a lack of support on the most important areas of focus. Additionally, it is critical that the efforts pursued have strong alignment with each other and the overall zero carbon plan.

- c) Zero Carbon by 2030 is a critical and aggressive timeline. As SMUD evaluates grants, partnerships and new business opportunities, it must be done in the context of achieving zero carbon by 2030. This timeline constraint must be considered when looking at the technology and commercial readiness levels of companies SMUD is considering partnering with. Similarly, grants and other external funds that have timelines that extend beyond 2030 may lack alignment with the 2030 Zero Carbon Plan. Pursuit of diversified business to help achieve zero carbon is a priority, but this pursuit will extend beyond 2030.

5) Recommendation

It is recommended that the Board accept the Fiscal Year 2025 Monitoring Report for SD-19, Diversified Business.

APPENDIX A

Selection of Grant Descriptions

1. Catalyst Fund- Workforce Development Grant

Project Name: Catalyst Fund Workforce Development Grant

Funding Awarded: \$508,000

The 'Capitol Region Skilled Trades Workforce Pipeline Program' (Project) leverages regional experts in the Utilities, Transportation Infrastructure, and Commercial Construction Opportunity Industry Sectors to formally analyze the region's pipeline of skilled trades workforce with particular attention to identifying barriers to entry for disinvested community members. Utilizing detail from the initial analysis, this same cohort will co-create a robust curriculum that focuses on 'Common Skills' shared amongst the employer pool. The expectation for this Exploratory project is for members to consider and commit to pursuing shared training opportunities with potential to operationalize strategies that foster inclusion and ensure equitable outcomes. The concept for this Exploratory project originated from available regional data paired with repeated anecdotal evidence shared amongst employers within the project's targeted opportunity sectors. The throughline of the data and evidence was repeated emphasis on applicants having 'missing skills' due to lack of appropriate training.

2. FAST Grant

Project name: *SACommunity EV Hubs*

Funding Awarded: \$2,812,421

Sacramento Municipal Utility District (SMUD), in partnership with Sacramento International Airport (SMF), Sacramento Valley Station (SVS), California State University, Sacramento (CSUS), ChargerHelp! (CH!), and AECOM, proposed the deployment of Direct Current Fast Charging stations (DCFCs) at three locations in Sacramento, enabling increased access to electric vehicle (EV) charging for ride-share drivers, food delivery drivers, rental car fleets, shared mobility services, and residents. The project will support the deployment of three fast charging hubs, with a total of 15 stations and 30 ports, strategically located in optimum locations with high on-demand transportation volume, near multi-family housing properties, and with quick and easy access to main transportation corridors. SMUD will develop a mobile app, integrated with an e-Roaming platform, to enable convenient access to locate chargers, activate sessions, and pay for charging across multiple charging networks through a single account. Development of this single public charging interface will allow users to find, compare, and use multiple public charging options, without having to create and manage multiple proprietary apps. Development of this app and use of the e-Roaming platform will also allow SMUD to offer discounts and special rates to on-demand drivers and other target customer groups. SMUD's *SACommunity EV Hubs* project will support

the Sacramento region's access to charging infrastructure for high mileage on-demand transportation services and the public. *SACommunity EV Hubs* will deploy a model that transitions charging in high-traffic communities from a constrained amenity to accessible infrastructure. These plazas will enhance access to public charging while attracting service drivers with affordable rates and shared infrastructure to ease their financial burden.

3. **REACH 2.0 Grant**

Project Name: SMUD Multifamily EV Charging Community

Funding Awarded: \$5,000,000

Sacramento Municipal Utility District (SMUD), in partnership with the Sacramento Metropolitan Air Quality Management District (SMAQMD), Uber, and dozens of Sacramento area property owners, managers, and developers, has been awarded funding to deploy and demonstrate a replicable and scalable approach to delivering affordable electric vehicle (EV) charging for multifamily homes (MFH). SMUD Multifamily EV Charging Community proposes to deploy over 400 AC chargers at 26 multifamily (MF) residential and MF-adjacent locations across Sacramento, with 92% of sites located within disadvantaged, low-income, or affordable housing communities.

The SMUD Multifamily EV Charging Community project increases regional at-home EV charging access while testing and validating a scalable, replicable business case and promising technology solutions to catalyze the deployment of level 1 and 2 electric vehicle service equipment (EVSE) at and near MFH. The project proposes to deploy best-fit design and engineering solutions at each site, combined with a newly developed SMUD EV app featuring an integrated e-Roaming platform to offer novel rate designs through member charging networks. The project will also leverage existing programs and organizational resources to prepare for scale. The combination will deliver an equitable, streamlined, high-quality, and cost-effective charging experience.

4. **CERRI Grant**

Funding Awarded: \$25.5M

Total Project Cost: \$69.7M

In 2025, SMUD won the California Energy Resilient and Reliable Infrastructure (CERRI) grant administered by the California Energy Commission with funding provided by the federal Department of Energy. The purpose of this grant is to install 192-240 Network Protectors and 110,000-200,000 circuit feet of underground cable. The project targets pre-1970 installations that are currently past their useful life and require immediate upgrades to preserve reliability and grid resilience. Installations will take place across the City of Sacramento and be completed between 2026-2031.

APPENDIX B

Community Choice Aggregator Detail

SMUD Community Energy Services currently provides 12 services to nine (9) community choice aggregators representing 2.8M meters. CES has averaged approximately one new CCA client and one new service launch per year. There are 25 operational CCAs in California representing 15M customers or about 38% of California. SMUD continues to invest in new CCA, utility, jurisdiction and energy company business activities.

Customer Care and Operations	Data and Insights	Engagement and Branding
• Contact Center • Billing • Debt Collections • Custom CRM Systems	• Data Management • Market Research • Data Analytics	• Customer Programs • Electrification Concierge • Marketing • Digital Payments • CARE Enrollments

Community Choice Aggregator Clients

In 2002, Assembly Bill 117 was passed to establish Community Choice Aggregation in the State by authorizing Community Choice Aggregators (“CCAs”) to aggregate customer electric load and purchase electricity for customers. SMUD sees the growth of CCAs as an opportunity to support organizations with values closely aligned with SMUD’s values, while also generating additional revenue for SMUD. CCA programs are proliferating in the State thanks to support for expanding renewable energy use and desire for local control, particularly for electricity procurement. There are numerous CCAs operating in the State, and more are anticipated to launch in the future. CCAs are responsible for procuring wholesale power, setting the generation rate, providing customer care, understanding customer needs, and engaging customers through programs and other services. The local investor-owned utility (“IOU”) continues to deliver electricity from the electric grid, maintain its electric infrastructure, bill customers and collect payments.

In October 2017, SMUD contracted with Valley Clean Energy (“VCE”). VCE is a joint powers agency formed in 2016 by the City of Woodland, the City of Davis and Yolo County to implement a local CCA program. The service territory expanded to include the City of Winters in 2021.

In February 2018, SMUD contracted with Ava Community Energy (“Ava” formerly East

Bay Community Energy). Ava is a joint powers agency formed in 2016 by the cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, Piedmont, San Leandro and Union City in Alameda County to implement a local CCA program. Ava expanded its territory to the cities of Pleasanton, Newark, and Tracy in April 2021. An expansion of Stockton is planned for 2025.

In June 2019, SMUD contracted with Silicon Valley Clean Energy ("SVCE"). SVCE is a joint powers agency formed in 2016 by the cities of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County to implement a local CCA program.

In October 2022, SMUD contracted with Marin Clean Energy ("MCE"). MCE is a joint powers agency formed in 2010 and represents 37 member communities across four Bay Area counties: Contra Costa, Marin, Napa and Solano.

In December 2022, SMUD contracted with Sonoma Clean Power ("SCP"). SCP is a joint powers agency that serves Sonoma and Mendocino counties.

In May 2024, SMUD contracted with Central Coast Community Energy ("3CE"). 3CE is a joint powers agency representing County of Monterey, County of San Benito, County of Santa Cruz, County of Santa Barbara, Arroyo Grande, Buellton, Capitola, Carmel, Carpinteria, Del Rey Oaks, Goleta, Gonzales, Greenfield, Grover Beach, Guadalupe, Hollister, Marina, Monterey, Morro Bay, Pacific Grove, Paso Robles, Pismo Beach, Salinas, Sand City, San Juan Bautista, San Luis Obispo, Santa Cruz, Santa Maria, Scotts Valley, Seaside, Soledad, Solvang, and Watsonville. Atascadero and unincorporated San Luis Obispo County are anticipated to begin service in January 2025.

In August 2024, SMUD contracted with San Jose Clean Energy ("SJCE"). SJCE is a joint powers agency that serves San Jose.

In September 2025, SMUD contracted with Apple Valley Choice Energy ("AVCE"). AVCE is a joint powers agency that serves the Town of Apple Valley.

In October 2025, SMUD contracted with Redwood Coast Energy Authority ("RCEA") to perform market research for the Northern Rural Energy Network (NREN).

APPENDIX C

Partner List and Description

- 1) Emerson (Formerly: AspenTech, Open System International, Inc.):** 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. DERMS Phase 1 and ADMS development is complete, implemented Q3 2022. DERMS Phase 2 and Phase 3 design and development completed and implemented in Q3 2024. Phase 4 design has begun continuing development of the core DERMS system functionality.

OSI Inc. was bought by Emerson for \$1.6 billion in an all-cash transaction on October 1, 2020. The acquisition added to Emerson's existing \$1 billion standalone software and associated engineering implementation services portfolio. Then in May 2022, Emerson combined its industrial software businesses – OSI Inc. and its Geological Simulation Software business – with AspenTech to create a global industrial software leader. On March 12, 2025, Emerson acquired all outstanding shares of AspenTech, which is now a wholly owned subsidiary of Emerson. The Emerson partnership continues to contribute revenue to the portfolio.

- 2) ESS Inc.:** ESS is a long-duration energy storage system developer established in 2011, whose technology is based on earth-abundant iron, salt and water to deliver environmentally safer solutions capable of providing up to 8 hours of flexible energy capacity for commercial and utility-scale energy storage applications, with a long-term design target of 12-17 hours duration.

SMUD and ESS established a joint collaboration agreement in 2022 that called for ESS to deliver a mix of its Energy Warehouse™ and Energy Center™ long-duration energy storage (LDES) solutions for testing and evaluation on the SMUD electric grid beginning in 2023.

In 2023, SMUD installed and commissioned 6 Energy Warehouse™ products as part of its partnership with ESS, with a combined energy storage capacity of 3 MWh. Each Energy Warehouse iron-flow battery is packaged in a standard 40' shipping cargo container modified to house the electrolyte tanks, cell stack, and ancillary equipment such as pumps and electronics.

In 2025, before proceeding with the Energy Center™ phase of the partnership, ESS began a transition process involving corporate restructuring, furlough of employees, and a strategic shift to their next generation product the Energy Base which is a larger format package and focuses on a longer duration design target of 12-17 hours duration. As a result, SMUD had decided to conclude the pilot with ESS's older products.

In 2026, ESS announced diversification of its business by adding system design and construction services for another battery technology provider, Asylum Energy. SMUD continues to monitor the progression of ESS's next generation products.

- 3) **Cal EPIC (formerly the California Mobility Center):** The rebrand of the California Mobility Center (CMC) to Cal EPIC (California Energy, Power, and Innovation Collaborative) occurred on Earth Day in 2025. The new name in its entirety, California Energy, Power, and Innovation Collaborative, is clear on what the organization does and aims to be. As an accelerator for new technology that addresses energy and power needs, with a focus on zero-carbon solutions, Cal EPIC becomes a regional partner and destination for people to work together.

In 2025, Cal EPIC was awarded (and notified of awards) a total of \$5.3 million that extend through 2030 for the longest grants. Grant awards include: \$4 million from the California Energy Commission for Charge Yard (2030 end date), \$500,000 from GitLab Foundation for Rivian Technical Trades Program operations (2027 end date), \$500,000 from the State of California for the EPIC on the Road mobile classroom van to do workforce development in the eight-county region (2026 end date), and \$290,000 from the California Masonic Foundation to teach Sacramento high-school students about jobs in green careers that are available in Sacramento post-graduation (2027 end date)

The Capital Charge Yard was chosen by the California Energy Commission to be the first-of-its-kind EV Charger Testing Lab in California. Partners in this effort include the Korea Electrotechnology Research Institute and CharIN, two leaders who have done this work internationally and across the country. Partners from the ecosystem that sent letters of support included Kempower, Rivian, ChargePoint, and SMUD. Industry partners who are reaching out to Cal EPIC include Tesla, ABB, GM Energy, Task 53, Hubject, and many others who are looking to be a part of Charge Yard. The goal of Charge Yard is to create an interoperability and conformance testing space that is publicly available to EVSE and EV manufacturers as well as researchers. The Charge Yard is expected to help with universal standard creation and study opportunities for bidirectional power (V2X). In addition to testing and research inside the Charge Yard, Cal EPIC will host five events a year (two testing events and three policy and non-testing events) to support EVSE advancements and operations.

Cal EPIC's Rivian program partnership began in early-2025. The Rivian Technical Trades Program at Cal EPIC is the first Rivian workforce development program for EV technicians that is not associated with a community college. Cal EPIC is one of five technical trades programs for Rivian in the country and the only program in California. This is a 15-week program that selects people from the Sacramento community to become paid interns for Rivian while they learn skills for electric vehicle support. During this time, participants are paid \$24 per hour and offered a job for Rivian if they meet all requirements of the program. Through 2025, the Cal EPIC and Rivian partnership trained over 30 people and had participants provided job offers in Sacramento, the greater Bay Area, Fresno, San Diego, Phoenix, Tempe, and Salt Lake City.

Through 2025, Cal EPIC had trained over 700 people in the Sacramento region over the last three years. More than half of those participants came to the programs with a high-school level educational attainment. A majority of the trainees identified as a

minority population. A focus of the outreach was through partnership with SMUD and local community-based organizations that served diverse communities.

- 4) **Itron:** Itron Networked Solutions, Inc. has been a SMUD strategic partner for over 25 years, and in September 2024 SMUD entered into a Joint Sales Agreement (JSA) as part of a Strategic Value Partnership with ITRON. The JSA has the potential to generate revenue to offset software fees, as SMUD co-market products with ITRON to support and develop functionalities that enable Grid Edge intelligence to increase grid stability, resiliency, and reliability through visibility, management, and control of devices on the grid. In addition, SMUD also has a Joint Collaboration Agreement (JCA), if an opportunity presents itself in the future for co-development.
- 5) **Simple Energy (Uplight):** Since 2017, SMUD has partnered with Simple Energy to operate the SMUD Energy Store (smudenergystore.com) through a collaborative revenue-sharing agreement that generates approximately 4% of gross merchandise value in revenue. The online store offers a wide range of smart thermostats, connected home products, EV chargers, lighting, and water-saving products, many with instant rebates that significantly reduce costs on popular items. This partnership has fostered a strong, productive relationship that supports SMUD's energy efficiency goals, promotes customer programs, delivers high levels of customer satisfaction, enhanced customer engagement, and strong Value for Pay outcomes.

In 2025, the Energy Store continued to evolve its product mix and customer experience to better support SMUD programs and customer needs. Key accomplishments included increasing the My Energy Optimizer attachment rate from 42% to 50% for customers purchasing smart thermostats, adding a new Leviton EV charger compatible with Charge@Home program guidelines, and enhancing reporting to better support the Charge@Home program. The team also rolled out global promo code functionality to allow customers to leverage a single promo code for a predetermined length of time, helping streamline promotions and improve campaign flexibility.

Additional 2025 efforts focused on expanding customer engagement and product relevance. The store introduced new smart thermostat, advanced power strip, air purifier, and home safety product offerings, and procured new energy savings products informed by results from a SMUD Market Research study to support the first Renter Energy Savings Starter Set for a Q1 2026 rollout. The Energy Store also facilitated a booth at the Community Resource Expo, maintained an average 89% CSAT in 2025 compared with an 80% benchmark, and continued efforts to increase repeat purchasers. As of 2025, 6,200 EV chargers have been sold, reflecting continued strong customer demand and program alignment.

- 6) **Smart Energy Systems, Inc. dba Smart Energy Water (SEW):** SEW is a digital platform developer dedicated to solving global energy and water crises. SMUD and SEW are Co-developing innovative utility centric communication tools such as, customer facing self-service modules, payment processing (through SEW subsidiary I

Pay Smart), and eMobility. These tools support SMUD in our zero-carbon journey and may generate future shared revenue if the tools are adopted by other utilities. Both the SEW and I Pay Smart Joint Collaboration Agreements (JCAs) were extended through 12/31/2036.

As SMUD continues to build its eco-system with SEW, we anticipate the platform will be one of their most robust examples in North America by the end of 2027. As we are standing up the SEW platform, revenue or licensing offsets have not yet materialized. Budget cuts require that we focus on core functionality and opportunities to improve customer experience. Therefore, co-development of new products with SEW will likely be de-emphasized until 2028.

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-19, Diversified Business**, substantially in the form set forth in **Attachment ____** hereto and made a part hereof.

SSS No. SCS 26-181

BOARD AGENDA ITEM STAFFING SUMMARY SHEET

Committee Meeting & Date
Finance & Audit - 10/13/26
Board Meeting Date
October 15, 2026

TO					TO									
1.	Josh Langdon				6.	Jose Bodipo-Memba								
2.	Joe Schofield				7.									
3.	Joel Ledesma				8.									
4.	Jennifer Restivo				9.	Legal								
5.	Rhonda Staley-Brooks				10.	CEO & General Manager								
Consent Calendar		X	Yes		No <i>If no, schedule a dry run presentation.</i>		Budgeted		X	Yes		No <i>(If no, explain in Cost/Budgeted section.)</i>		
FROM (IPR)				DEPARTMENT						MAIL STOP		EXT.		DATE SENT
Greg Hovious				Procurement						EA404		4860		09/18/26

NARRATIVE:

Requested Action: Approve Contract Change No. 5 to Contract No. 4500146748 with Andritz Hydro Corp for the Camino Generator 1 Rehabilitation to increase the contract not-to-exceed amount by \$1,638,169, from \$12,323,835 to \$13,962,004.

Contract No. 4500146748 with Andritz Hydro Corp was approved by the Board (Resolution No. 24-06-12) in June 2024 for the Camino Generator 1 Rehabilitation for a period of two years for an amount not to exceed \$11,903,140.

Contract Change No. 01 extended the contract from September 30, 2026, to November 1, 2027, and replaced certain Special Conditions.

Contract Change No. 02 approved changes to the Technical Conditions necessary to account for certain existing site conditions and engineering changes to the Stator Coils and associated parts. Change No. 2 used 2.4% (282,234.08) of the available 10% (\$1,190,314) allowable contingency.

Contract Change No. 03 adjusted on site work dates as well as on site work duration. Substantial Completion is changed to the final paint application. Storage costs were added to the contract also. Change No. 03 used 1.1% (\$138,461) of the maximum 10% (\$1,190,314) allowable contingency.

Contract Change No. 04 added scope for site measurements services and pole removal work.

SMUD is now requesting to increase the contract by an additional \$1,638,169 to address two primary areas of potential cost: tariffs imposed on imported materials after contract award and unforeseen repair work that may be identified during the generator outage.

Since the original contract award, tariffs have been imposed on certain imported materials and equipment that were not known or reasonably accounted for at the time of award. SMUD is currently validating the contractor's tariff-related costs and will only authorize costs that are determined to be applicable, adequately supported, and consistent with the contract. The maximum potential tariff impact is estimated at \$800,000.

The remaining authorization will provide contingency for repairs that may be identified as the generator is disassembled and inspected. The nature of the rehabilitation work requires exposing existing-to-remain components that are not fully accessible for inspection prior to the outage. Non-conforming or deteriorated conditions may be discovered, particularly involving the stator frame and related components, that require timely repair.

Having this contract authority available during the outage will allow SMUD to authorize necessary repairs promptly, if needed, and reduce the risk of work stoppages, an extended outage, additional mobilization costs, and project schedule impacts.

The requested \$1,638,169 represents additional contract capacity and does not represent a commitment to expend the full amount. Tariff costs will be subject to SMUD's validation, and repair contingency will only be utilized for work determined necessary during the rehabilitation.

Staff recommends that the Board approve an additional \$1,638,169 in contract authorization to address validated tariff impacts and provide sufficient contingency to timely address unforeseen conditions discovered during the generator rehabilitation outage.

Contract Actions	Amount	Cumulative Total	Description
Original Contract	\$11,903,140		
Change No 01	\$0	\$11,903,140	Extend contract and Special Conditions changes
Change No 02	\$282,234	\$12,185,374	GM Contingency for Technical Conditions changes and add funds for Stator Coil changes
Change No 03	\$138,461	\$12,323,835	GM Contingency for Special Conditions changes and additional funds for equipment storage
Change No 04	\$0	\$12,323,835	Site Measurements and Pole Removal
Pending Contract Action	\$1,638,169	\$13,962,004	Contingency for tariffs and unforeseen conditions discovered during the generator rehabilitation outage

Board Policy: Board-Staff Linkage BL-8, Delegation to the CEO with Respect to Procurement; Strategic Direction
(Number & Title) SD-4, Reliability

Benefits: The additional funding provides sufficient contingency to timely address unforeseen conditions discovered during the generator rehabilitation outage.

Cost/Budgeted: \$13,962,004 Budgeted for 2026 and 2027 by Zero Carbon Energy Solutions.

Alternatives: As an alternative to approving the full \$1,638,169 in additional contract authorization capacity, the approval of a reduced increase limited to tariff-related costs that are validated by SMUD, up to \$800,000, and defer authorization for potential unforeseen repair work until those conditions are identified during the generator rehabilitation outage.

Under this alternative, SMUD would evaluate any non-conforming or deteriorated conditions discovered during disassembly and seek additional contract authorization, if required, based on the actual scope and estimated cost of the necessary repairs.

This approach would limit the current contract increase to costs that can be substantiated before authorization. However, it will remove SMUD's ability to respond immediately to unforeseen conditions discovered during the outage. If additional approval is required before repairs can proceed, the project could experience work stoppages, an extended outage, additional contractor or mobilization costs, schedule impacts, and lost generation.

Affected Parties: Zero Carbon Energy Solutions, Supply Chain Services, and Contractor

Coordination: Zero Carbon Energy Solutions, Supply Chain Services, and Legal

Presenter: Josh Langdon, Director, Power Generation

Additional Links:

SUBJECT

Camino Generator 1 Rehabilitation Contract Change

ITEM NO. (FOR LEGAL USE ONLY)

8

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, by Resolution No. 24-06-12, adopted on June 20, 2024, this Board authorized the Chief Executive Officer and General Manager to negotiate and award Contract No. 4500146748 to **Andritz Hydro Corp (Andritz)** for the Camino Generator 1 Rehabilitation for a period of two years for an amount not to exceed \$11,903,140; and

WHEREAS, Contract Change No. 1 extended the contract from September 30, 2026, to November 1, 2027, and replaced certain Special Conditions; and

WHEREAS, Contract Change No. 2 made changes to Technical Conditions necessary to account for certain existing site conditions and engineering changes to the stator coils and associated parts and increased the not-to-exceed amount by \$282,234, a portion of the allowable contingency; and

WHEREAS, Contract Change No. 3 adjusted on-site work dates as well as on-site duration, changed Substantial Completion to the final paint application, added storage costs, and increased the not-to-exceed amount by \$138,461, a portion of the allowable contingency; and

WHEREAS, Contract Change No. 4 added scope for site measurement services and pole removal work; and

WHEREAS, additional funds are needed due to two primary areas of potential cost, including i) tariffs imposed on imported materials after contract award and ii) unforeseen repair work that may be identified during the generator rehabilitation outage; **NOW, THEREFORE**,

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

Section 1. That this Board hereby approves negotiation and execution of Contract Change No. 5 and authorizes the Chief Executive Officer and General Manager, or her designee, to increase the contract not-to-exceed amount by \$1,638,169, from \$12,323,835 to \$13,962,004, for Contract No. 4500146748 with **Andritz Hydro Corp.**

Section 2. The Chief Executive Officer and General Manager, or her designee, is authorized to make future changes to the terms and conditions of the contract that, in her 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 amount and applicable contingencies.

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
Finance & Audit – 10/13/26

Board Meeting Date
October 15, 2026

TO					TO								
1.	Joe Schofield				6.	Rhonda Staley-Brooks							
2.	Yuva Palaniappan				7.	Jose Bodipo-Memba							
3.	Michael Champ				8.	Jennifer Restivo							
4.	Suresh Kotha				9.	Legal							
5.	Frankie McDermott				10.	CEO & General Manager							
Consent Calendar		X	Yes		No If no, schedule a dry run presentation.		Budgeted	X	Yes		No (If no, explain in Cost/Budgeted section.)		
FROM (IPR) Austin Svien					DEPARTMENT Procurement Operations					MAIL STOP EA404		EXT. 5159	DATE SENT 09/17/26

NARRATIVE:

Requested Action: Authorize the Chief Executive Officer and General Manager, or her designee, to negotiate and award a contract to International Business Machines Corporation (IBM) for SAP S/4HANA Implementation Services for the period November 1, 2026, through December 31, 2029, for a not-to-exceed amount of \$32,189,635.

Summary: SMUD has been using SAP since 1999 and is currently using SAP Enterprise Resource Planning (ERP) Central Component (ECC), SAP Customer Relationship Management (CRM) and SAP Business Warehouse (BW). With ECC, CRM and BW at end of life, it is imperative for SMUD to upgrade to the latest version of SAP, S/4HANA, SAP Service Cloud and SAP Business Data Cloud. SMUD must complete this upgrade to S/4HANA in order to ensure access to critical platform support. Additionally, SMUD will realize benefits that include risk reduction, security and compliance improvement, access to real-time analytics, a modernized user experience, and more. In October 2025, SMUD issued Request for Proposal No. RITM0102366.AS (RFP) to solicit proposals from qualified firms. SMUD received eight (8) proposals. IBM's proposed amount included costs of \$30,761,458. SMUD negotiated discounts of \$1,498,154, resulting in total costs of \$29,263,304 for Phase 1 and Phase 2 of the project. Due to the dynamic nature of this project and its criticality to the organization, SMUD is seeking approval to negotiate and award a contract to IBM, with a not-to-exceed value of \$32,189,635, which includes additional contingency for unforeseen costs and as-needed enhancements during the project. The result of evaluations and SMUD's award recommendation are shown below.

Recommendation: Award to the Highest Evaluated Responsive Proposer International Business Machines Corporation (IBM)

Bidders/Proposers Notified by Procurement: 28

Bidders/Proposers Downloaded: 97

Pre-Bid/Pre-Proposal Conference Attendance: 36

Bids/Proposals Received: 8

Responsive Proposals Received	P/F	SEED	Technical	Price	Total	Proposal Amount	SEED Credit	Evaluated Proposal Amount	Proposed Award Amount
		10	65	25	100				
International Business Machines Corporation	P	10	53.5	25	88.5	\$27,878,237	\$250,000	\$27,628,237	\$32,189,635

Elite Tech Fusion Inc.	Did not satisfy mandatory pass/fail requirements.
Delaware North America, LLC	Did not satisfy minimum point threshold.
Bramasol	Did not satisfy minimum point threshold.
Cognizant Technology Solutions	Did not satisfy minimum point threshold.
(CBS) Corporate Business Solutions America, Inc	Did not satisfy minimum point threshold.
HCL Technologies Limited	Did not satisfy minimum point threshold.
Deloitte Consulting LLP	Did not satisfy minimum point threshold.

Comments: The agreement is being negotiated by SMUD.

Board Policy: Board-Staff Linkage BL-8; Delegation to the CEO with Respect to Procurement.
(Number & Title)

Benefits: Implementation of upgraded ERP system by highly qualified firm with proven experience.

Cost/Budgeted: \$32,189,635; Budgeted for 2026-2029 by Information Technology.

Alternatives: Do not award to IBM, seek alternate service provider through another competitive solicitation.

Affected Parties: Information Technology, Procurement Operations, and Contractor

Coordination: Information Technology and Procurement Operations

Presenter: Yuva Palaniappan, Director, Enterprise Systems, Strategy and Governance

Additional Links:

SUBJECT

Contract Award for SAP S/4HANA Implementation Services

ITEM NO. (FOR LEGAL USE ONLY)

9

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

RESOLUTION NO. _____

WHEREAS, SMUD has been using SAP since 1999 and is currently using SAP Enterprise Resource Planning (ERP) Central Component (ECC), which is at end of life; and

WHEREAS, an upgrade to the current version of SAP, S/4HANA, is imperative in order to ensure access to critical platform support as we all as other benefits; and

WHEREAS, in October 2025, SMUD issued Request for Proposal No. RITM0102366.AS (RFP) to solicit qualified firms to provide SAP S/4HANA Implementation Services; and

WHEREAS, eight 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, **International Business Machines Corporation (IBM)** is hereby determined and declared to be the highest evaluated responsive proposer to provide SAP S/4HANA Implementation Services.

Section 2. The Chief Executive Officer and General Manager, or her designee, is authorized, on behalf of SMUD, to negotiate and award a contract to **IBM** for SAP S/4HANA Implementation Services for the period November 1, 2026, through December 31, 2029, for a not-to-exceed amount of \$32,189,635.

Section 3. The Chief Executive Officer and General Manager, or her designee, is authorized to make future changes to the terms and conditions of the

contract that, in her 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 amount and applicable contingencies.

SSS No. S, E, RES 26-08

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date

ERCS – 10/14/26

Board Meeting Date

October 15, 2026

TO					TO				
1.	Frankie McDermott				6.				
2.	Brandy Bolden				7.				
3.	Suresh Kotha				8.				
4.	Joel Ledesma				9.	Legal			
5.					10.	CEO & General Manager			

Consent Calendar		☐	Yes	☒	No <i>If no, schedule a dry run presentation.</i>	Budgeted	☒	Yes	No <i>(If no, explain in Cost/Budgeted section.)</i>
FROM (IPR)		DEPARTMENT				MAIL STOP		EXT.	DATE SENT
Emily Bacchini		Safety, Environmental and Real Estate Services				B209		6334	9/18/26

NARRATIVE:

Requested Action: Adopt the California Environmental Quality Act (CEQA) Mitigated Negative Declaration (MND) for the Jackson Bulk Substation Project (Project); adopt the Mitigation Monitoring and Reporting Program; and approve the Project.

Summary: SMUD is proposing to construct and operate the Jackson Bulk Substation Project. The Project includes construction of an approximately 18-acre bulk substation that would convert high-voltage electricity from 230,000-volt (230 kV) transmission lines to 69,000-volt (69 kV) distribution service through transformers for delivery to residential and commercial customers along the Jackson Highway corridor. Key features of the new substation include installation of electrical equipment, a control building, driveway access, site fencing, lighting, stormwater drainage, and utilities. SMUD would also grade the remaining 26 acres for drainage improvements and maintain temporary soil storage south of the substation footprint. The substation would retain a 200-foot setback from Jackson Road and Excelsior Road.

In addition, the Project includes construction of new or modified overhead power lines to connect the substation to the existing electrical grid. Planned overhead line improvements include approximately 0.7 miles of new 69 kV overhead lines and conversion of approximately 5.35 miles of existing 12,000-volt (12 kV) pole and overhead lines to single-circuit 69 kV overhead lines with a 12 kV underbuild. This work would require replacement of existing poles with taller, stronger poles. Project construction is expected to begin in the first quarter of 2030, with commissioning and energization scheduled for December 2032. The anticipated construction duration is approximately 36 months.

An Initial Study (IS)/MND was prepared to evaluate the Jackson Bulk Substation Project and concludes that, with mitigation, the Project would not have a significant effect on the environment. Mitigation measures were incorporated for Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, and Tribal Cultural Resources. In addition, an environmental justice evaluation was included in the IS/MND, beyond CEQA requirements, to help inform decision makers about whether the Project supports SMUD's goal of advancing environmental justice and economic vitality in all communities within SMUD's service area, with special attention to historically underserved neighborhoods. The evaluation concluded that no existing environmental justice conditions would be worsened by the Project.

The Draft IS/MND was released for a 30-day agency and public comment period beginning May 5, 2026, and ending June 5, 2026. During this period, interested individuals and public agencies were invited to submit written comments on the document. Copies of the Draft IS/MND were made available for public review in hard copy at SMUD offices (the Customer Service Center and East Campus Operations Center), posted on SMUD's public website, published in the *Sacramento Bee*, and distributed to the State Clearinghouse through the Governor's Office of Land Use and Climate Innovation. A Notice of Intent was distributed to property owners and occupants of record within 1,500 feet of the proposed substation site and

within 500 feet of the off-site overhead line work. A virtual CEQA public meeting was held on May 18, 2026; one member of the public attended.

During the public comment period, SMUD received five comment letters from the Sacramento Area Sewer District (SASD), Central Valley Flood Protection Board (CVFPB), California Department of Fish and Wildlife (CDFW), Defenders of Wildlife, and Wilton Rancheria. The comments from SASD and CVFPB did not raise environmental issues or concerns regarding the adequacy, accuracy, or completeness of the environmental document. The letters from CDFW and Defenders of Wildlife provided comments and recommendations on mitigation measures in the Draft IS/MND related to biological and wetland resources. These comments did not change the conclusions presented in the IS/MND, although some revisions were made in the Final IS/MND to the biological resources chapter in response to the comment letters. The letter from Wilton Rancheria offered comments and recommendations on mitigation measures related to biological and Tribal Cultural Resources. These comments also did not change the conclusions presented in the IS/MND. The revisions made in the Final IS/MND did not change the Draft IS/MND's conclusion that the Project, as mitigated, would not result in a significant impact. Copies of all correspondence and responses to comments are included in the Final IS/MND.

Board Policy: (Number & Title) The Project would support the following Board adopted policies: Strategic Direction SD-4, Reliability, the goals to achieve transmission and distribution system reliability and make necessary electrical system upgrades to maintain load serving capability and increase the electric system capacity to meet expected customer electrical load growth; Strategic Direction SD-7, Environmental Leadership, goals relating to avoiding and reducing adverse environmental impacts; and Strategic Direction SD-5, Customer Relations, proactively engaging customers and other stakeholders.

Benefits: This Project would support continued safe and reliable electric service to existing and planned development in the Jackson corridor of Sacramento County. It would also provide greater operational flexibility between circuits and substations in the area and maximize the use of available SMUD property and resources by utilizing the Jackson Bulk Substation site acquired in 2019.

Cost/Budgeted: \$246,329 was budgeted for the CEQA document. Construction of the Jackson Bulk Substation Project is outside the 5-year budget cycle and therefore not currently budgeted.

Alternatives: Adopt the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and approve the Project; return to staff for further study; or reject the Initial Study and Mitigated Negative Declaration.

Affected Parties: Energy Delivery and Operations including substation engineering, civil engineering, and distribution and transmission planning and operations, Wilton Rancheria and the general public.

Coordination: Environmental Services, Energy Delivery and Operations, Communications, Marketing & Community Relations, Regional & Local Governmental Affairs, Legal CDFW, Wilton Rancheria and the general public.

Presenter: Emily Bacchini, Director of Safety, Environmental and Real Estate Services

Additional Links:

SUBJECT

Jackson Bulk Substation Project (CEQA)

ITEM NO. (FOR LEGAL USE ONLY)

11

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

DRAFT

Sacramento Municipal Utility District Jackson Bulk Substation Project

Final Initial Study and Mitigated Negative Declaration • October 2026

State Clearinghouse No. 2026050302



Powering forward. Together.



Sacramento Municipal Utility District Jackson Bulk Substation Project

Final Initial Study and Mitigated Negative Declaration • October 2026

State Clearinghouse No. 2026050302

Lead Agency:

SMUD—Environmental Management
6201 S Street, MS H201
Sacramento, CA 95817-1899

or

P.O. Box 15830 MS H201
Sacramento, CA 95852-1830
Attention: Sarah Ahmed
(916) 732-6974 or Sarah.Ahmed@smud.org

Prepared by:

AECOM
2020 L Street, Suite 300
Sacramento, CA 95811
Contact: Jeff Thomas
(510) 646-2145 or jeff.thomas@aeom.com



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Appendix A Draft IS/MND (As Revised)

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LIST OF ABBREVIATIONS

AB	Assembly Bill
AMM	Avoidance and Minimization Measure
APP	Avian Protection Program
ASTM	ASTM International (American Society for Testing and Materials)
BUOW	Burrowing Owl
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGF	California Fish and Game Code
CHRIS	California Historical Resources Information System
CNPS	California Native Plant Society
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
DPR	California Department of Parks and Recreation
EIR	Environmental Impact Report
ESA	Federal Endangered Species Act
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
ITP	Incidental Take Permit
LSAA	Lake and Streambed Alteration Agreement
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
PM	Particulate Matter
PRC	Public Resources Code
ROG	Reactive Organic Gases
RPA	Registered Professional Archaeologist
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utility District
SWPPP	Stormwater Pollution Prevention Plan
TCR	Tribal Cultural Resource
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VP	Vernal Pool

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EXECUTIVE SUMMARY

Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to evaluate the potential physical environmental impacts associated with Sacramento Municipal Utility District's (SMUD) Jackson Bulk Substation Project (proposed project) in compliance with the California Environmental Quality Act (CEQA). SMUD is the lead agency responsible for complying with the provisions of CEQA.

Project Description

SMUD is proposing to construct a new approximately 18-acre bulk substation on a 44-acre site at the corner of Jackson Road and Excelsior Road, and construct new or modified overhead 69,000-volt (69kV) and 230,000-volt (230kV) power lines that would link the substation to the electrical grid. Using transformers, substations transfer power from the transmission system to the distribution system that serves a particular area. The substation reduces the voltage from the large transmission lines and moves power into a system that powers residential and commercial customers. The proposed substation would convert high voltage from 230kV transmission lines to 69kV through transformers for local distribution into residential and commercial customers along the Jackson Corridor.

Findings

As lead agency for compliance with CEQA requirements, SMUD finds that the proposed project would be implemented without causing a significant adverse impact on the environment. Mitigation measures for potential impacts associated with Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, and Tribal Cultural Resources would be implemented as part of SMUD's project through adoption of a mitigation monitoring and reporting program.

Cumulative Impacts

CEQA requires lead agencies to assess whether a project's incremental effects are significant when viewed in connection with the effects of other past, present, and foreseeable future projects. Based on the analysis presented in the Draft IS/MND, the proposed project would not contribute incrementally to considerable environmental changes when considered in combination with other projects in the area. Therefore, the potential cumulative environmental effects of the proposed project were determined to be less than cumulatively considerable. All identified potentially significant impacts would be mitigated to less than significant.

Growth-Inducing Impacts

SMUD exists as a public agency to supply electrical energy to customers in the Sacramento area. It has an obligation to serve all new development approved by the local agencies and Sacramento County. SMUD does not designate where and what new development may occur.

Determination

On the basis of this evaluation, SMUD concludes:

- The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered species, or eliminate important examples of the major periods of California history or prehistory.
- The project would not achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The project would not have impacts that are individually limited, but cumulatively considerable.
- The project would not have environmental effects that cause substantial adverse effects on human beings, either directly or indirectly.
- No substantial evidence exists to demonstrate that the project would have a substantive negative effect on the environment.



Signature

Sarah Ahmed
Printed Name

October 1, 2026
Date

Sacramento Municipal Utility District
Lead Agency

1.0 INTRODUCTION

1.1 Project Overview

SMUD is proposing to construct and operate the new Jackson Bulk Substation Project (proposed project). The proposed project includes the construction of a new approximately 18-acre bulk substation and new or modified overhead 69,000-volt (69kV) and 230,000-volt (230kV) power lines that would link the substation to the electrical grid. Using transformers, substations transfer power from the transmission system to the distribution system that serves a particular area. The substation reduces the voltage from the large transmission lines and moves power into a system that powers residential and commercial customers. The proposed substation would convert high voltage from 230kV transmission lines to 69kV through transformers for local distribution into residential and commercial customers along Jackson Corridor.

1.2 Environmental Process Summary

Copies of the Draft IS/MND were made available in hard copy form for public review at SMUD offices (Customer Service Center and East Campus Operations Center), posted on SMUD's public website, and distributed to the State Clearinghouse via the Governor's Office of Land Use and Climate Innovation. A notice of intent was distributed to property owners and occupants of record within 1,500 feet of the proposed substation site and within 500 feet of the off-site overhead line work. The 30-day public review period began on May 5, 2026, and ended on June 5, 2026. SMUD held a public meeting on May 18, 2026. Five comment letters were received during the comment period. The comment letters and SMUD's written responses are presented in Section 2.0 of this document. As noted in Section 2.0, the conclusions presented in the Draft IS/MND were not altered in response to comments received, although minor revisions and clarifications to mitigation measures were made.

CEQA Guidelines Section 15073.5 provides the conditions for determining if recirculation of a negative declaration is required before adoption. Section 15073.5(a) states:

A lead agency is required to recirculate a negative declaration when the document must be substantially revised after public notice of its availability has previously been given pursuant to Section 15072, but prior to adoption.

According to Section 15073.5(b), a substantial revision is defined as:

(1) A new, avoidable significant effect is identified, and mitigation measures or project revisions must be added in order to reduce the effect to insignificance, or

- (2) The lead agency determines that the proposed mitigation measures or project revisions will not reduce potential effects to less than significant and new measures or revisions must be required.*

SMUD has determined that none of the aforementioned conditions were satisfied following public notice; therefore, recirculation of the Draft IS/MND is not required. SMUD, as the lead agency, may proceed to present the Final IS/MND to the SMUD Board for action.

Circumstances under which recirculation is not required include:

- (1) Mitigation measures are replaced with equal or more effective measures pursuant to Section 15074.1
- (2) New project revisions are added in response to written or verbal comments on the project's effects identified in the proposed negative declaration which are not new avoidable significant effects.
- (3) Measures or conditions of project approval are added after circulation of the negative declaration which are not required by CEQA, which do not create new significant environmental effects and are not necessary to mitigate an avoidable significant effect.
- (4) New information is added to the negative declaration which merely clarifies, amplifies, or makes insignificant modifications to the negative declaration. (Section 15073.5[c])

No changes to the project or the Draft IS/MND are required that would warrant recirculation of the document.

1.3 Mitigation Measures

This section presents the mitigation measures SMUD would implement to address potential impacts on Air Quality (as addressed in Section 3.2 of the Draft IS/MND), Biological Resources (as addressed in Section 3.4 of the Draft IS/MND), Cultural Resources (as addressed in Section 3.5 of the Draft IS/MND), Geology and Soils (as addressed in Section 3.7 of the Draft IS/MND), Hazards and Hazardous Materials (as addressed in Section 3.9 of the Draft IS/MND), and Tribal Cultural Resources (as addressed in Section 3.18 of the Draft IS/MND). These measures reflect text revisions as documented in Section 3.0 of this Final IS/MND.

1.3.1 Air Quality

Conflict With or Obstruct Implementation of the Applicable Air Quality Plan

As discussed in Section 3.3, “Air Quality” of the Draft IS/MND, project construction-related activities would result in emissions of reactive organic gases (ROG), nitrogen oxides (NO_x), and particulate matter (PM). Construction emissions would be below SMAQMD-recommended daily and annual thresholds of significance for construction activities (Table 3.3-3 in the Draft IS/MND). However, because construction of the proposed project would generate PM emissions, implementation of construction BMPs would be required in order to apply SMAQMD’s non-zero thresholds of significance for PM. Therefore, without implementation of applicable SMAQMD construction BMPs for PM emissions, the proposed project’s construction activities could potentially conflict with or obstruct implementation of the applicable air quality plans.

Operational activities associated with the proposed project would include regular inspection and maintenance activities and would result in the generation of criteria air pollutant emissions associated with worker vehicle trips, including ROG, NO_x, PM₁₀, and PM_{2.5}. Since the project would generate PM emissions during operations, implementation of BMPs would be required to apply SMAQMD’s non-zero thresholds of significance for PM. Project operational emissions would not exceed SMAQMD-recommended thresholds of significance (Table 3.3-4 in the Draft IS/MND). However, since the proposed project’s operational activities would generate PM emissions during routine maintenance activities, the proposed project could potentially conflict with or obstruct implementation of applicable air quality plans if the applicable BMPs were not implemented.

Mitigation Measures AQ-1a and AQ-1b require implementation of SMAQMD’s Basic Construction Emission Control Practices and PM Operational Best Management Practices to avoid conflicts with the applicable air quality control plan. Implementation of the measures would reduce impacts to ***less than significant***.

Mitigation Measure AQ-1a. Implement SMAQMD Basic Construction Emission Control Practices for Substation Construction Activities

- The construction contractor shall include as a condition in the grading, improvement, and demolition plans, the following basic construction emissions control practices (best management practices) to be initiated at the start and maintained throughout the duration of construction activities associated with the proposed substation.
 - Water all exposed active work areas two times daily, or with adequate frequency for continued moist soil. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas,

and access roads. However, do not overwater to the extent that sediment flows off the site.

- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
 - Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
 - Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
 - Suspend excavation, grading, and/or demolition activity when average wind speeds exceed 20 mph.
 - All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
 - Install wheel washers, rattle plates and/or rock aprons for all exiting trucks or equipment leaving the site.
 - Treat site accesses from the paved road with a 6 to 12- inch layer of gravel to reduce generation of road dust and road dust carryout onto public roads.
 - Post a publicly visible sign with the telephone number and person to contact at the County of Sacramento regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of SMAQMD shall also be visible to ensure compliance.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
 - Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.
 - Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified

mechanic and determined to be running in proper condition before it is operated.

Mitigation Measure AQ-1b. Implement SMAQMD PM Operational Best Management Practices

- SMUD shall follow best management practice requirements for fugitive dust control during operational and maintenance activities associated with the project:
 - Limit vehicle speeds on unpaved roads to 15 mph.
 - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
 - Compliance with anti-idling regulations for diesel powered commercial motor vehicles (greater than 10,000 gross vehicular weight rating). The current requirements include limiting idling time to 5 minutes and installing technologies on the vehicles that support anti-idling. Information can be found on the California Air Resources Board's website:
<https://ww2.arb.ca.gov/ourwork/programs/idle-reduction-technologies/idle-reduction-technologies>.

Cumulatively Considerable Net Increase of Any Criteria Pollutant Emissions

Sacramento County is currently in nonattainment for federal and State ozone, State PM₁₀, and federal PM_{2.5}. The thresholds developed by SMAQMD are designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards. Projects that would exceed SMAQMD-recommended thresholds of significance would be considered to potentially contribute a cumulatively considerable net increase of criteria air pollutant emissions to the region. As described above, the proposed project would not exceed construction or operational thresholds of significance identified by SMAQMD. However, applicable BMPs identified by SMAQMD for construction and operational project phases would need to be implemented to use SMAQMD's non-zero thresholds of significance. With implementation of **Mitigation Measure AQ-1a** and **AQ-1b** described above, impacts would be *less than significant*.

1.3.2 Biological Resources

Substantial Adverse Effect on Vernal Pool Branchiopods

As described in Section 3.4, "Biological Resources" of the Draft IS/MND, the seasonal wetlands, vernal pools, vernal swales, and seasonal swales scattered throughout the

substation site and similar aquatic features along the overhead line corridor provide suitable habitat for vernal pool branchiopods. At the substation site, grading and construction of substation elements would permanently impact 1.993 acre of suitable habitat for vernal pool branchiopods. Construction vehicles and heavy machinery driven through wetland features could cause compaction of soil and disturb branchiopod cysts. Work activities adjacent to wetland features may also result in temporary impact to habitat through sediment runoff or spilling of oil or other pollutants. Pole replacement activities along the overhead line corridor could result in impacts to suitable habitat for vernal pool branchiopods through vehicle movement, ground disturbance, dust generation (from construction activities), spread of invasive or non-native plants, and hazardous materials exposure.

The SWPPP required pursuant to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, SMUD HCP general and species-specific avoidance and minimization measures (AMMs), and mitigation measures described below would reduce potential impacts on vernal pool branchiopod species to ***less than significant***.

G-AMM2 Minimize Impacts of Work Area. To the extent possible, SMUD field crews and contractors will reduce the work area footprint and the duration of work at a work area to reduce the potential for take of Covered Species.

G-AMM3 Work Area Access. SMUD field crews and contractors will use existing paved and unpaved roads to access the work area where available. Vehicles and equipment will be parked on pavement, existing roads, or previously disturbed areas to the maximum extent feasible. When this is not feasible, SMUD will implement G-AMM4: Off Road Speed Limit, VP-AMM1: Avoid Driving through Vernal Pools, and VP-AMM2: Minimize Vehicle Impacts on Vernal Pools.

G-AMM4 Off Road Speed Limit. When driving off of paved roads in Covered Species habitat, vehicles will not exceed a speed limit of 15 miles per hour.

G-AMM5 Work Area General Guidelines. Trash dumping, littering, open fires (such as barbecues), hunting, and pets will be prohibited in Covered Activity work areas. All garbage will be removed from the project site at the end of each workday.

G-AMM6 Erosion Control Measures. SMUD field crews will utilize standard erosion and sediment control best management practices (BMPs) (pursuant to the most current version of the California Stormwater Best Management Practices Handbook) to prevent construction site runoff into SMUD HCP Riverine; Open Water/Fringe; Other Depressional Wetland; and Vernal Pool, Seasonal Wetland, and Swale land cover types when Covered Activities are the source of potential erosion. Soil will be stockpiled within established work area

boundaries, and stockpiles will be located so as not to enter water bodies, stormwater inlets, or other standing bodies of water. Stockpiled soil will be covered prior to precipitation events. Erosion control materials will be removed once the site has been stabilized.

G-AMM7 Equipment Refueling. SMUD field crews will not refuel or conduct equipment maintenance activities within 250 feet of SMUD HCP Vernal Pool, Seasonal Wetland, and Swale, and within 100 feet of any Riverine, Open Water/Fringe, or Other Depressional Wetlands land cover types. If refueling must be conducted closer to wetlands, SMUD field crews will construct a secondary containment area subject to review by an environmental specialist and/or biologist. SMUD field crews will maintain spill prevention and cleanup equipment in refueling areas.

G-AMM8 Hazardous Materials Clean Up. SMUD field crews will clean up any spilled oil, fuel, or other automotive fluids. SMUD field crews will ensure that all construction areas have proper spill clean-up materials (absorbent pads, sealed containers, booms, etc.) to contain the movement of any spilled substances.

G-AMM11 Stabilization of Disturbed Areas. SMUD field crews will remove any temporary fill or construction debris and will backfill all excavation sites with native soil, and with crushed gravel around the bases of poles for compaction, following completion of Covered Activities. Disturbed areas will be stabilized by compacting soils and returning to pre-project contours so that the areas are commensurate with the topography of the surrounding soil, or qualified stormwater personnel will prescribe BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction. SMUD field crews will not move weed-infested gravel, rock, and other fill materials to undisturbed areas that are relatively free of weeds, but will focus fill in areas that have previously been disturbed.

G-AMM12 Excess Soil. When excess soil is spread out following an excavation activity, SMUD will not place soil in SMUD HCP Riverine; Open Water/Fringe; Other Depressional Wetlands; or Vernal Pool, Seasonal Wetland, and Swale land cover types or in Covered Species Modeled Habitat that contains burrows.

G-AMM13 Soil Management. SMUD field crews will stockpile soil within established work area boundaries and position stockpiles so as not to enter SMUD HCP Riverine; Open Water/Fringe; Other Depressional Wetlands; or Vernal Pool, Seasonal Wetland, and Swale land cover types or in Modeled Habitat with burrows. SMUD field crews will cover stockpiled soil with visqueen or tarps prior to precipitation events.

G-AMM14 Revegetation of Work Areas. If a Covered Activity temporarily disturbs 0.1 acre or more of Modeled Habitat for a Covered Species that contains

herbaceous vegetation, SMUD field crews will revegetate the area with a native weed free seed mix within 6 months of disturbance.

G-AMM15 Temporary Vehicle Access to Work Areas. SMUD field crews will minimize clearing vegetation and grading for temporary vehicle access to the maximum extent feasible. Any temporary road will be returned to pre-project contours and the soil compacted for stabilization, or qualified stormwater personnel will prescribe BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction.

G-AMM17 Night Lighting. For Covered Activities that occur at night, SMUD field crews will position any temporary lights needed away from any Covered Species habitat. For lighting at permanent facilities, such as substations, all lighting will be oriented downward towards major equipment to minimize glare onto surrounding property.

G-AMM18 Unanticipated Covered or ESA and CESA-Listed Species. SMUD field crews will stop work and contact SMUD Environmental Services if a species listed under the FESA and CESA or a Covered Species is found within the work area or within 100 feet of a work area. SMUD Environmental Services will have authority to stop activities, and will do so, until appropriate corrective measures have been completed or it is determined that the individual FESA and CESA-listed or Covered Species will not be taken (including harmed). If the FESA and CESA-listed or Covered Species is in immediate danger, only a qualified biologist can capture and relocate the Covered Species. The Service must be contacted if the species is FESA and CESA-listed, but is not a Covered Species.

VP-AMM1 Avoid Driving through Vernal Pools. SMUD field crews will avoid driving through SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover to the maximum extent feasible. When this is not feasible, SMUD will implement VP-AMM2: Minimize Vehicle Impacts on Vernal Pools.

VP-AMM2 Minimize Vehicle Impacts on Vernal Pools. If a Covered Activity work area or access to the work area is located on SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover, SMUD field crews will evaluate site conditions and determine if soil moisture is present. If soil moisture is present, the field crew will coordinate with the Environmental Services team to identify alternative measures to minimize disturbance of Covered Species Modeled Habitat. Alternative measures may include laying down rubber matting, creating temporary bridges over swales, or using alternate access routes as prescribed by SMUD Environmental Services to minimize impacts. If it is not feasible for SMUD to avoid driving through Vernal Pool, Seasonal Wetland, and Swale land cover while moisture is present, SMUD will track the acres of disturbance, and those acres will count toward take limits.

VP-AMM3 Vernal Pool Covered Species Soil Stockpile. For Covered Activities in SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover, SMUD field crews will stockpile the upper 4 inches of topsoil from within the ordinary high-water mark of any aquatic features separately during excavations. This topsoil will be replaced within the aquatic feature and manipulated so as to restore the original contours within the aquatic feature. Soil compaction will be minimized to the extent consistent with utility standards. Erosion control measures such as straw wattles, coconut fiber rolls/blankets, silt fencing, and as determined by the qualified biologist, will be implemented where necessary to protect topsoil stockpiles and keep the seed bank and/or cysts in the stockpiled soil viable.

VP-AMM4 Avoid Occupied Orcutt Grass Habitat. SMUD Environmental Services will review design plans to ensure that no new poles or other facilities are placed in vernal pools that are known (as noted in an up to date [current at time of project implementation] California Natural Diversity Database query) to support slender Orcutt grass or Sacramento Orcutt grass.

VP-AMM6 Covered Vernal Pool Invertebrate Work Window. When Vernal Pool Invertebrate Covered Species Modeled Habitat is present within 250 feet of Covered Activities, Environmental Services will schedule the Covered Activity to occur in the dry season (approximately April 15 through October 15) and prior to the first significant rain (0.25 inch in 24 hours) to the maximum extent feasible. If the Covered Activity cannot be performed in the dry season, the field crew will implement additional measures as prescribed by SMUD Environmental Services to avoid or minimize impacts. Additional measures could include, but are not limited to, directing crews on access, use of erosion/sediment fencing, use of access mats or other techniques to avoid direct or indirect effects, requiring foot access, or requiring a biological monitor during the activity. If additional measures do not result in total avoidance, SMUD will mitigate at a 0.5:1 ratio for temporary and/or 3:1 for permanent direct habitat disturbance or loss.

VP-AMM7 Vernal Pool Biological Monitor. If Covered Activities will directly impact SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover (modeled habitat), a qualified biologist will be present onsite and monitor the Covered Activity to ensure that all applicable AMMs are implemented correctly and that no unnecessary ground disturbance or take of species occurs. The qualified biologist will have the authority to stop all activities that could result in such take or destruction, and will do so, until appropriate corrective measures have been completed. SMUD will report any unauthorized take to USFWS and/or CDFW within 24 hours.

Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel. All construction personnel will be given environmental awareness training before the start of construction. As part of the training, an

environmental awareness handout will be provided to all personnel that describes and illustrates sensitive resources (i.e., waters of the U.S. and state, special-status species and habitat, nesting birds/raptors) to be avoided during construction and lists applicable permit conditions identified by state and federal agencies to protect these resources.

Mitigation Measure BIO-2: Compensate for Impacts to Wetlands and Aquatic Species Habitat. Mitigation for both temporary and permanent vernal pool tadpole shrimp and vernal pool fairy shrimp habitat disturbance will be provided as part of SMUD's HCP. Temporary impacts would be mitigated at a 0.5:1 ratio and permanent impacts would be mitigated at a 3:1 ratio through a combination of preservation and restoration, and indirect impacts within 250 feet of the substation would be mitigated at a 1:1 ratio. SMUD will use vernal pool restoration or creation credits at a 1:1 ratio (i.e., 2:1 preservation, 1:1 restoration/creation). If required, additional compensation for impacts to aquatic resources (wetlands and other waters) would be determined during Clean Water Act Section 401 and 404 and CFGC Section 1600 permitting.

Substantial Adverse Effect on Monarch Butterfly

Although no monarch adults, eggs, or larvae were observed on the substation site, suitable habitat in the form of narrowleaf milkweed (*Asclepias fascicularis*) was observed within the substation site. Milkweed may also be present along the overhead line corridor. Ground-disturbing activities and vehicles or heavy machinery activity could cause impacts on monarch eggs or larvae that may be present within or adjacent to the substation site or along the overhead line corridor. The following mitigation measures would be implemented to reduce impacts to ***less than significant***:

G-AMM2 Minimize Impacts of Work Area (described above)

G-AMM3 Work Area Access (described above)

G-AMM5 Work Area General Guidelines (described above)

G-AMM11 Stabilization of Disturbed Areas (described above)

G-AMM14 Revegetation of Work Areas (described above)

G-AMM18 Unanticipated Covered or ESA and CESA-Listed Species
(described above)

Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel (described above)

Mitigation Measure BIO-3: Conduct a Pre-construction Survey for Monarch Butterfly. A biologist would conduct a pre-construction clearance survey for

milkweed within 48 hours prior to the initiation of ground disturbance within the project work limits at the substation site and overhead line corridor pole locations. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas. This survey would consist of walking transects while conducting visual encounter surveys within areas that would be subject to clearing, staging, or other ground disturbing activities. If milkweed is identified within the construction work area, the biologist would determine an appropriate no-disturbance buffer to ensure avoidance of the milkweed. Fencing or flagging would be used to maintain the buffer around milkweed areas during project activities.

If botanical surveys completed for overhead lines/pole work rule out presence of milkweed, a pre-construction survey is not required.

If milkweed plants are observed within the project work limits and no eggs or larvae are observed on the plant(s), the plant(s) should be removed in a manner that allows them to be re-planted outside of the project work limits and fencing should be installed around the placement area to ensure avoidance during construction activities. If the monarch butterfly larvae or eggs are observed on milkweed plants or other vegetation, then the biologist will establish a fenced 5-foot no disturbance buffer around the plant(s). This buffer will remain in place until the egg or larvae have metamorphosed. Once the metamorphosis has occurred, the plant(s) may be removed and replanted.

Substantial Adverse Effects on Crotch's Bumblebee

Although no Crotch's bumblebees were observed in the substation site during the 2025 surveys, the grasses and forbs land cover and seasonal floral resources growing in the seasonal wetland and vernal pools within the substation site and the grasses and forbs land cover along the overhead line corridor offer suitable habitat for the species. Ground-disturbing activities and vehicles or heavy machinery activity could cause impacts on Crotch's bumblebee individuals that may be present within or adjacent to the substation site and along the overhead line corridor. The following mitigation measures would be implemented to reduce impacts to ***less than significant***.

G-AMM2 Minimize Impacts of Work Area (described above)

G-AMM3 Work Area Access (described above)

G-AMM5 Work Area General Guidelines (described above)

G-AMM11 Stabilization of Disturbed Areas (described above)

G-AMM14 Revegetation of Work Areas (described above)

G-AMM18 Unanticipated Covered or ESA and CESA-Listed Species
(described above)**Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel** (described above)

Mitigation Measure BIO-4: Implement Crotch's Bumblebee Avoidance Measures. A qualified biologist will conduct at least 3 focused foraging and nesting surveys within suitable habitat, between April and August the year prior to the initiation of ground disturbance, within the project work limits at the substation site and overhead line corridor pole locations. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas. Surveys will follow CDFW's "Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species" dated June 6, 2023 (CDFW 2023) or the most recent guidance. If Crotch's bumblebee is observed, the qualified biologist may propose site-specific measures to avoid take or SMUD would consult with CDFW to obtain an Incidental Take Permit if take of Crotch's bumblebee may occur during project activities.

Substantial Adverse Effects on Western Spadefoot

No western spadefoot were identified on the substation site during the various field surveys, but there is suitable upland, dispersal, and breeding habitat within the substation site and along the overhead line corridor. Project activities may cause impacts to individuals within or near the aquatic features or burrows within the substation site. Temporary impacts may include sediment runoff into aquatic features within the substation site. Pole replacement and installation activities along the overhead line corridor could result in impacts through vehicle movement, ground disturbance, dust generation (from construction activities), spread of invasive or non-native plants, and hazardous materials exposure. The following mitigation measures would be implemented to reduce impacts to ***less than significant***.

G-AMM2 Minimize Impacts of Work Area (described above)

G-AMM3 Work Area Access (described above)

G-AMM4 Off Road Speed Limit (described above)

G-AMM5 Work Area General Guidelines (described above)

G-AMM6 Erosion Control Measures (described above)

G-AMM7 Equipment Refueling (described above)

G-AMM8 Hazardous Materials Clean Up (described above)

G-AMM11 Stabilization of Disturbed Areas (described above)

G-AMM12 Excess Soil (described above)

G-AMM13 Soil Management (described above)

G-AMM14 Revegetation of Work Areas (described above)

G-AMM15 Temporary Vehicle Access to Work Areas (described above)

G-AMM17 Night Lighting (described above)

G-AMM18 Unanticipated Covered or ESA and CESA -Listed Species
(described above)

Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel (described above)

Mitigation Measure BIO-2: Compensate for Impacts to Wetlands and Aquatic Species Habitat (described above)

Mitigation Measure BIO-5: Environmentally Sensitive Area Exclusion Fencing. Prior to the start of construction at the substation site, environmentally sensitive area (ESA) exclusion fencing will be installed along the wetland avoidance area boundary. The fencing material shall consist of silt fence or equivalent barrier and will be of a height and material suitable for wildlife exclusion. The fencing shall be checked regularly and maintained until all construction is complete.

Mitigation Measure BIO-6: Biological Monitor. A biological monitor shall be present within the substation site during initial ground disturbance (including wildlife exclusion fencing installation and vegetation clearing), dewatering activities in stockponds, and during all pole work along the overhead line corridor within 10 feet of suitable water features.

Mitigation Measure BIO-7: Special-status Species Encounter. Consistent with G-AMM-18, if a special-status wildlife species, including species of special concern, is found within the construction area during project activities, work will immediately stop within a 50-foot radius of the individual. The individual will be allowed to leave the project work limits on their own and construction may resume once it is determined that the individual has moved away safely from the construction zone. If the individual is unable to leave the project work limits on their own, the individual may be moved, unless it is state or federally listed. If it is a state or federally listed wildlife species or SMUD HCP Covered species, procedures described in G-AMM-18 above will be implemented.

Mitigation Measure BIO-8: Conduct Pre-construction Survey for Western Spadefoot. A qualified biologist will conduct a pre-construction clearance survey for western spadefoot within the substation site and overhead line corridor work limits within 48 hours prior to the initiation of ground disturbance. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas. The pre-construction clearance survey will be limited to suitable water features, surrounding hydrologic or geographic features that support inundation during rain events, and associated upland habitat (e.g. grasslands and burrows). Crevices and burrows will be searched and avoided to the maximum extent practicable.

If western spadefoot are present within the project work limits (including egg masses or tadpoles), then CDFW will be notified and additional avoidance and minimization measures will be implemented.

Substantial Adverse Effects on Northwestern Pond Turtle

No northwestern pond turtles were observed within the substation site during the 2025 surveys, but there is suitable aquatic and upland habitat within the substation site and along the overhead line corridor, including within and adjacent to Morrison Creek, Elder Creek, tributaries of those streams, and ponds adjacent to the project work limits. Project activities may cause impacts to individuals within or near the aquatic features and upland habitat within the substation site and along the overhead line corridor. Impacts may also include sediment runoff into aquatic features within the substation site or overhead line corridor. The following mitigation measures would be implemented to reduce impacts to ***less than significant***.

G-AMM2 Minimize Impacts of Work Area (described above)

G-AMM3 Work Area Access (described above)

G-AMM4 Off Road Speed Limit (described above)

G-AMM5 Work Area General Guidelines (described above)

G-AMM6 Erosion Control Measures (described above)

G-AMM7 Equipment Refueling (described above)

G-AMM8 Hazardous Materials Clean Up (described above)

G-AMM11 Stabilization of Disturbed Areas (described above)

G-AMM12 Excess Soil (described above)

G-AMM13 Soil Management (described above)

G-AMM14 Revegetation of Work Areas (described above)

G-AMM15 Temporary Vehicle Access to Work Areas (described above)

G-AMM17 Night Lighting (described above)

G-AMM18 Unanticipated Covered or ESA and CESA-Listed Species
(described above)

Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel (described above)

Mitigation Measure BIO-2: Compensate for Impacts to Wetlands and Aquatic Species Habitat (described above)

Mitigation Measure BIO-5: Wildlife Exclusion Fencing (described above)

Mitigation Measure BIO-6: Biological Monitor (described above)

Mitigation Measure BIO-7: Special-status Species Encounter (described above)

Mitigation Measure BIO-9: Conduct Pre-construction Survey for Northwestern Pond Turtle. A qualified biologist will conduct a pre-construction clearance survey for northwestern pond turtle within 48 hours prior to the initiation of ground disturbance within the project work limits at the substation site and overhead line corridor pole locations. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas. Pre-construction clearance surveys will be limited to suitable water features, surrounding hydrologic or geographic features that support inundation during rain events, and associated upland habitat (grasslands and other areas with seasonally friable soils that support burrows).

If an adult northwestern pond turtle is located within upland habitat in the construction work area, the turtle will be allowed to voluntarily move outside of the work area on its own volition. If the species does not move on its own and is in the immediate vicinity of construction activities, a qualified biologist will relocate the turtle. If an active pond turtle nest containing either pond turtle hatchlings or eggs is found, appropriate avoidance measures would be implemented, which may include a “no-disturbance” buffer around the nest site until the hatchlings have moved to a nearby aquatic site.

Substantial Adverse Effects on Special-status Raptors and Nesting Birds

Wetlands provide suitable nesting habitat for tricolored blackbird, while mature trees within the substation site provide suitable nesting habitat for Swainson’s hawk.

Tricolored blackbird and Swainson's hawk were present within the substation site, and burrows present within the substation site offer suitable nesting habitat for burrowing owl. Two adult Swainson's hawks were observed nesting within the substation site in a large eucalyptus tree during April, May, and June 2025 surveys and successfully fledged three chicks in July 2025. Grasses and forbs land cover within the substation site provides suitable foraging habitat for tricolored blackbird, Swainson's hawk, northern harrier, burrowing owl, white-tailed kite, and loggerhead shrike. The grasses and forbs and pasture land cover within the overhead line corridor also provides suitable foraging habitat for the species.

Project construction would remove trees and shrubs within the substation site, which has the potential to directly remove bird nests. Driving vehicles and equipment through the annual grassland (grasses and forbs) may also result in destruction of bird nests. Additionally, if active bird nests are present, construction activities occurring during the nesting season (between February 1 and August 31), such as demolition, ground disturbance, and presence of construction equipment and crews, could generate noise and visual stimuli that may result in disturbance to active bird nests, and potentially resulting in nest abandonment. Nest abandonment may result in death of chicks or loss of eggs if the adult bird does not return to the nest. Nest abandonment would be considered a significant impact. The removal of aquatic vegetation and shrubs, and ground-disturbing activities within the substation site and overhead line work limits could also affect foraging efforts of tricolored blackbird, burrowing owl, Swainson's hawk, northern harrier, and other nesting migratory birds and raptors.

The following mitigation measures would be implemented to reduce these impacts to ***less than significant***.

G-AMM2 Minimize Impacts of Work Area (described above)

G-AMM3 Work Area Access (described above)

G-AMM4 Off Road Speed Limit (described above)

G-AMM5 Work Area General Guidelines (described above)

G-AMM11 Stabilization of Disturbed Areas (described above)

G-AMM14 Revegetation of Work Areas (described above)

G-AMM15 Temporary Vehicle Access to Work Areas (described above)

G-AMM18 Unanticipated Covered or ESA and CESA -Listed Species
(described above)

Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel (described above)

Mitigation Measure BIO-6: Biological Monitor (described above)**Mitigation Measure BIO-7: Special-status Species Encounter** (described above)

Mitigation Measure BIO-10: Conduct Pre-construction Survey for Migratory Birds and Raptors, Including Special-status Species. For any construction activities that will occur between February 1 and August 31 within the substation site and overhead line corridor work limits, a qualified biologist shall conduct a pre-construction survey in suitable nesting habitat within 300 feet for passerine nests (including for tricolored blackbird and loggerhead shrike), within 500 feet for raptor nests and ground nests (including for northern harrier and burrowing owl), and within 0.5 mile for Swainson's hawk and white-tailed kite nests. If construction activities occur during bird nesting season (between February 1 and August 31), including equipment staging and construction, surveys shall be conducted within 7 days prior to commencement of construction activities.

If no active nests are found during the pre-construction survey, no additional mitigation measures are required.

If an active bird or raptor nest is identified within the construction work area or an active raptor nest is identified within the appropriate survey buffers from the construction work area, a no-disturbance buffer shall be established around the nest to avoid disturbance of the nesting birds or raptors until a qualified biologist determines that the young have fledged and are foraging on their own or the nest has failed. The extent of these buffers shall be determined by the biologist and shall depend on the species identified, level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers. In addition to the establishment of buffers, other avoidance measures may include monitoring the nest during construction and restricting the type of work that can be conducted near the nest site. If a lapse in construction activities for one week or longer occurs during the avian breeding season, another pre-construction survey shall be performed prior to work re-initiation.

Mitigation Measure BIO-11: Conduct Preconstruction Survey for Burrowing Owl and Implement Avoidance Measures.

1. **Burrowing Owl Surveys.** SMUD shall conduct a BUOW survey over all suitable habitat present within the project site. BUOW surveys shall be conducted by a qualified biologist in accordance with the protocol described in the Staff Report on Burrowing Owl Mitigation (CDFW, March 7, 2012). If possible, surveys should be conducted during both the breeding (February 1 – August 31) and non-breeding seasons (September 1 – January 31) immediately preceding the planned start of construction activities to ascertain

the seasonal residency status of any owls occupying the site. The presence of BUOW or their sign anywhere on the site or within a 500-foot accessible radius around the project site shall be recorded and mapped. Surveys shall disclose all burrows and occurrence of sign of BUOW on the project site and within the 500-foot buffer.

2. Burrowing Owl Take Avoidance. During the breeding season (February 1 to August 31), surveys shall document whether BUOW are nesting in or within 500 feet of the Project area. During the non-breeding season (September 1 to January 31), surveys shall document whether BUOW are using habitat in or directly adjacent to any area to be disturbed. Survey results shall only be valid for the season (breeding or non-breeding) during which the survey was conducted. If a lapse in Project-related work of fifteen (15) calendar days or longer occurs, another focused survey and consultation with SMUD and CDFW shall be required before Project work can be reinitiated. If a BUOW or evidence of presence at or near a burrow entrance is found to occur within 500 feet of the Project site, the following measures shall be implemented:
 - a. If BUOW are found during the non-breeding season (approximately September 1 to January 31), SMUD shall establish a minimum 160-foot (50-meter) buffer zone around active burrows. The buffer zone shall be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a qualified biologist confirms that such measures do not cause agitated behavior.
 - b. If BUOW are found during the breeding season (approximately February 1 to August 31), the Project applicant shall:
 - i. Avoid all nest sites that could be disturbed by Project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging).
 - ii. Establish a minimum 500-foot non-disturbance buffer zone around nests, unless otherwise approved by SMUD in writing, in consultation with CDFW. The buffer zone shall be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer will be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. Construction shall only occur within the 500-foot buffer zone during the breeding season if a qualified biologist monitors

the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged and moved off site. Any modifications to this buffer shall be approved by SMUD, in consultation with CDFW prior to its implementation. The buffer reduction request shall include relevant information and/or propose new measures to justify the buffer reduction. The buffer area must be clearly marked to prevent Project-related activities from occurring within the buffer zone.

3. Eviction of Burrowing Owls. If after all applicable avoidance and minimization measures are implemented and SMUD needs to evict BUOW, an ITP shall be obtained for the activity and a BUOW eviction plan shall be developed by a qualified biologist for SMUD's review and approval, in consultation with CDFW. This plan, including its proposed mitigation, shall be consistent with the most recent available guidelines (e.g., 2012 Staff Report on Burrowing Owl Mitigation). Burrow eviction shall only be conducted during the non-breeding season for burrows located in the Project footprint, and in limited instances within a buffer zone around the Project site, as determined by SMUD in consultation with CDFW after all avoidance and minimization measures have been exhausted.

Mitigation Measure BIO-12: Raptor Nest Relocation or Removal and Mitigation for Loss of Swainson's Hawk Foraging Habitat.

1. Prior to the relocation (preferred) or removal of raptor nests within the project site, the SMUD Avian Protection Program (APP) Coordinator will be contacted. The APP Coordinator will document the status of the nest to determine when it is unoccupied and coordinate with CDFW regarding the plan for relocation or removal. Removal or relocation will occur during the non-nesting season and when the nest is unoccupied. Once the nest is removed or relocated, the nesting tree will be removed.
2. To offset net impacts on foraging habitat for breeding Swainson's hawks SMUD shall mitigate the loss of Swainson's hawk foraging habitat in accordance with CDFW recommendations (CDFG 1994) by providing mitigation lands or securing Swainson's hawk mitigation bank credits. Mitigation shall be provided for impacts to suitable foraging habitat occurring within 10 miles of an active Swainson's hawk nest, as determined by a qualified biologist and in consultation with CDFW. All mitigation lands protected under this mitigation measure shall be protected in a form acceptable to CDFW (e.g., through fee title acquisition or conservation easement) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk.

Substantial Adverse Effects on Pallid Bat

No pallid bats were identified within the substation site during the survey, but suitable foraging and roosting habitat are present throughout the substation site. Tree removal within the substation site and impacts to grasses and forbs land cover within the substation site and overhead line corridor may result in a temporary and permanent loss of roosting and foraging habitat for bats. Temporary impacts may also result from project-related disturbances such as noise or vibration from use of heavy machinery used near roost sites. The following mitigation measures would be implemented to reduce impacts to *less than significant*.

G-AMM2 Minimize Impacts of Work Area (described above)

G-AMM3 Work Area Access (described above)

G-AMM4 Off Road Speed Limit (described above)

G-AMM5 Work Area General Guidelines (described above)

G-AMM11 Stabilization of Disturbed Areas (described above)

G-AMM14 Revegetation of Work Areas (described above)

G-AMM15 Temporary Vehicle Access to Work Areas (described above)

G-AMM17 Night Lighting (described above)

Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel (described above)

Mitigation Measure BIO-13: Conduct a Pre-construction Roosting Bat Survey Prior to Tree Removal or Trimming. A qualified biologist shall conduct a pre-construction survey of all trees proposed for removal or trimming within the substation site for the presence of bat roosts. Surveys will be conducted between February 16 to September 30. Surveys will entail direct inspection of trees, including around the base within piles of leaf litter, or nocturnal surveys. The survey shall occur no more than 2 weeks prior to the removal or trimming of trees within the substation site. If roosting habitat is present and occupied, then a qualified biologist shall determine the type of roost. If roosting bats are found within the substation site outside of the inactive season (November 1 to February 15) and the maternity season (April 1 to September 30), the bats may be excluded from the roost using methods developed by a qualified biologist experienced in developing and implementing bat mitigation and exclusion plans in coordination with CDFW. If bats are found to be roosting within the substation site during the inactive season or the maternity season, the roost must be avoided or relocated in consultation with CDFW. Removal of bat roost trees

would be conducted in two phases: the tree will be limbed on day 1 and the tree will be removed on day 2.

Substantial Adverse Effects on American Badger

No American badgers were identified within the substation site during the 2025 biological surveys, but suitable habitat is present throughout the project area. Project activities may have impacts to individuals or dens located within the substation and/or overhead line corridor. Impacts to grasses and forbs land cover within the substation site and overhead line corridor may result in a temporary and permanent loss of habitat for American badgers. Temporary impacts may also result from project-related disturbances such as noise or vibration from use of heavy machinery used near den sites. If active American badger dens are present, construction activities occurring during the natal season (between March 15 and June 15), such as ground disturbance and presence of construction equipment and crews, could generate noise and visual stimuli that may result in disturbance to active dens, and potentially resulting in den abandonment. Den abandonment may result in death of cubs if the adult badger does not return to the den. The following mitigation measures would be implemented to reduce impacts to *less than significant*.

G-AMM2 Minimize Impacts of Work Area (described above)

G-AMM3 Work Area Access (described above)

G-AMM4 Off Road Speed Limit (described above)

G-AMM5 Work Area General Guidelines (described above)

G-AMM11 Stabilization of Disturbed Areas (described above)

G-AMM14 Revegetation of Work Areas (described above)

G-AMM15 Temporary Vehicle Access to Work Areas (described above)

G-AMM17 Night Lighting (described above)

Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel (described above)

Mitigation Measure BIO-7: Special-status Species Encounter (described above)

Mitigation Measure BIO-14: Conduct a Pre-construction American Badger Survey Prior to Ground Disturbance. A qualified biologist shall conduct a pre-construction survey of suitable habitat at the substation site and overhead line corridor work limits within 7 days prior to the initiation of construction. The goal of the survey is to search for potentially active badger dens. If potential dens for

American badger are detected during the pre-construction survey, the biologist will determine if the den is active. If the den is deemed inactive or unoccupied, no additional measures are needed. If an American badger is denning on or within 50 feet of the project work limits, SMUD shall avoid the den by a minimum 50-foot buffer. If an active den cannot be avoided, an avoidance or eviction plan must be developed and implemented in coordination with CDFW.

Substantial Adverse Effects on Special-status Plants

No special-status plant species are expected to occur within the proposed substation site. However, special-status plants could be present along the overhead line corridor. The new and upgraded overhead line poles have the potential to adversely affect special-status plants. The avoidance and minimization measures and mitigation measures described below would reduce potential impacts to special-status plants to *less than significant*.

G-AMM2 Minimize Impacts of Work Area (described above)

G-AMM3 Work Area Access (described above)

G-AMM4 Off Road Speed Limit (described above)

G-AMM5 Work Area General Guidelines (described above)

G-AMM6 Erosion Control Measures (described above)

G-AMM7 Equipment Refueling (described above)

G-AMM8 Hazardous Materials Clean Up (described above)

G-AMM11 Stabilization of Disturbed Areas (described above)

G-AMM12 Excess Soil (described above)

G-AMM13 Soil Management (described above)

G-AMM14 Revegetation of Work Areas (described above)

G-AMM15 Temporary Vehicle Access to Work Areas (described above)

G-AMM18 Unanticipated Covered or ESA and CESA-Listed Species
(described above)

VP-AMM4 Avoid Occupied Orcutt Grass Habitat (described above)

Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel (described above)

Mitigation Measure BIO-7: Special-status Species Encounter (described above)**Mitigation Measure BIO-15: Conduct Preconstruction Plant Surveys within Overhead Line Corridor Work Limits and Implement Avoidance Measures.**

A qualified botanist/biologist will conduct a botanical survey of the pole replacement and installation work limits prior to the initiation of construction activities within suitable land cover for special-status plants along the overhead line corridor. The survey will follow the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018) along with the CNPS and USFWS survey protocols. The survey(s) would occur during the appropriate blooming period for the special-status plant species with potential to occur within the overhead line corridor.

If no special-status plant species are found, no further avoidance measures are required.

If special-status plant species are found during botanical surveys, the following measures would be implemented:

- If a federally listed plant species (slender Orcutt grass or Sacramento Orcutt grass) is found, the SMUD HCP avoidance and minimization measures identified in the covered plant conservation strategy would be implemented. This includes the implementation of VP-AMM4 Avoid Occupied Orcutt Grass Habitat as described above.
- If a state-listed plant is found within the overhead line corridor work limits, the botanist will map the extant boundaries of the population and record the number of individuals present. An avoidance buffer along with exclusion fencing will be placed around the area to avoid disturbance to the plants to the greatest extent possible. If avoidance is not possible, SMUD will consult with CDFW to develop mitigation and/or compensation measures necessary to avoid adverse effects to the population.
- If a CNPS-listed plant is found within the overhead line corridor work limits, the botanist will map the extant boundaries of the population and record the number of individuals present. An avoidance buffer along with exclusion fencing will be placed around the area to avoid disturbance to the plants to the greatest extent possible. Where it is not feasible to avoid special-status plants locations within the construction areas, seed collection and transplanting shall be performed for annual plant species in affected areas. Prior to excavation work in areas that support occupied special-status plant habitat, the topsoil (roughly the first 3-4 inches of soil where dormant seeds would be present) will be removed and stockpiled onsite. After finished

grades generally have been achieved, the stockpiled topsoil will be redistributed within disturbed areas in the project area. In particular, the soil should be redistributed into areas that provide appropriate/suitable habitat for the species. Stockpiled topsoil will be protected from wind and water erosion and from compaction. In areas where topsoil has been spread, equipment traffic will be limited, to the extent practicable, to minimize compaction. Post construction, areas where topsoil was spread will be protected from wind and water erosion until after the next growing season (spring/summer) using typical stabilization methods. If hydroseeding is used, hydroseed will be comprised of a native seed mix.

1.3.3 Cultural Resources

Cause a Substantial Adverse Change in the Significance of an Archaeological Resource

As discussed in Section 3.5, “Cultural Resources” of the Draft IS/MND, the records search results from the North Central Information Center (NCIC) and two pedestrian surveys in 2025 revealed eight previously recorded historic-age cultural resources in the project area. The previously identified sites do not appear to be eligible; therefore, they are not considered unique archaeological resources. However, project-related ground-disturbing activities could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5. These activities could damage or destroy previously undiscovered archaeological resources. Implementation of Mitigation Measures CUL-1a and CUL-1b would reduce this impact to ***less than significant***.

Mitigation Measure CUL-1a: Worker Awareness Training. A cultural resources awareness and respect training program will be provided to all construction personnel active on the project site prior to implementation of earth moving activities. A representative or representatives from culturally affiliated Native American Tribe(s) will be invited to participate in the development and delivery of the cultural resources training in coordination with a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists. The program will include relevant information regarding sensitive Tribal cultural resources, including protocols for resource avoidance, applicable laws regulations, and the consequences of violating them. The program will also underscore the requirement for confidentiality and culturally appropriate treatment of any find of significance to Native Americans and protocols, consistent, to the extent feasible, with Native American Tribal values.

Mitigation Measure CUL-1b: Unanticipated Cultural Resources Discovery. In the event of an inadvertent discovery of cultural resources (excluding human remains or Tribal Cultural Resources [TCRs]) during construction, all work must

halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeology, shall be retained to assess the significance of the find. If the find is determined to be significant by the qualified archaeologist (i.e., because it is determined to constitute either a historical resource, unique archaeological resource, or tribal cultural resource), the archaeologist shall develop appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include, but would not necessarily be limited to, preservation in place (which shall be the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or contiguous block unit excavation and data recovery (when it is the only feasible mitigation, and pursuant to a data recovery plan). If the discovery constitutes a TCR, any data recovery shall be in coordination with Tribes. Curation of resources is not recommended under Tribal protocol and reburial of resources where, or in close proximity to where they were excavated, is preferred.

Disturb Any Human Remains, Including Those Interred Outside of Formal Cemeteries

Project construction would involve grading, trenching, excavation, and potentially other earthmoving activities. There has been no indication or evidence that the area has been used for human burials in the recent or distant past; therefore, human remains are unlikely to be encountered. However, in the unlikely event that human remains are discovered during subsurface activities, they could be inadvertently disturbed and damaged. Implementation of Mitigation Measure CUL-2 would reduce this impact to *less than significant*.

Mitigation Measure CUL-2: Unanticipated Human Remains. Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the District shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.

1.3.4 Geology and Soils

Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature

The proposed overhead line corridor along Jackson Road, beginning approximately 1 mile northwest of the substation site and continuing to the northwestern end of the alignment, would be constructed within the Riverbank Formation. The Riverbank Formation is of high paleontological sensitivity, and thus construction activities that occur in this rock formation would have the potential to accidentally damage or destroy any previously unknown unique paleontological resources that may be present. Implementation of Mitigation Measure GEO-1 would reduce this impact to ***less than significant***.

Mitigation Measure GEO-1: Avoid Impacts to Unique Paleontological Resources

- Prior to the start of earthmoving activities associated with the overhead line corridor along Jackson Road northwest of the substation site, SMUD shall retain a qualified archaeologist or paleontologist to present construction worker personnel training. The training shall inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered.
- If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify SMUD.
- In the event of a paleontological discovery, SMUD shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan if necessary. The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan shall be implemented by SMUD before construction activities can resume at the site where the paleontological resource or resources were discovered.

1.3.5 Hazards and Hazardous Materials

Create a Significant Hazard to the Public or the Environment

As discussed in Section 3.9, “Hazards and Hazardous Materials” of the Draft IS/MND, ground disturbing activities associated with the substation and overhead line corridor could encounter known or unidentified environmentally contaminated soil or groundwater. Implementation of Mitigation Measure HAZ-1 would reduce risks related to encountering unidentified soil or groundwater contamination and the potential for adverse effects to workers, the public, or the environment through handling, storage, or disposal of contaminated soil or groundwater.

Mitigation Measure HAZ-1: Manage Accidental Discovery of Hazardous Materials. If contaminated soils or potentially hazardous items are discovered during earth moving activities, all ground-disturbing activities within 25 feet shall be halted until a qualified SMUD employee or SMUD representative can assess the conditions on the site. SMUD will notify and coordinate with the appropriate agency regarding findings of hazardous materials, as necessary. If it is determined that the material cannot be re-incorporated into the project site, it shall be hauled by a qualified hauler to an appropriate waste disposal facility.

1.3.6 Tribal Cultural Resources

Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource

As discussed in Section 3.18, “Tribal Cultural Resources” of the Draft IS/MND, and based on information shared during AB 52 consultation with Wilton Rancheria, and the positive NAHC Sacred Land Files search received on February 9, 2026, there are presumed Tribal cultural resources near the project area, in addition to the Tosewin District Tribal Cultural Landscape, although no known sites, features, sacred places, or objects have been identified. Project-related ground-disturbing activities could damage or destroy presumed tribal cultural resources. Implementation of Mitigation Measures TCR-1 and TCR-2 would reduce this impact to ***less than significant***.

Mitigation Measure TCR-1: Spot Check Monitoring During Ground-disturbing Activities. There is a potential for unidentified cultural sites, artifacts or unanticipated TCRs to be present below the surface. Therefore, a Tribal monitor from Wilton Rancheria will perform spot check monitoring, up to half-day monitoring, two (2) times per week, during ground-disturbing activities including trenching, excavating, and grading. The Tribal representative will be given 48 hours’ notice before ground disturbance starts. The Tribal monitor will complete daily logs. Logs will confirm any finds, the locations of the find, time and date in accordance with SMUD’s Inadvertent Discovery Plan. If Tribal cultural resources are identified that have the potential to be adversely affected by the project, SMUD will implement *Mitigation Measure TCR-2 Unanticipated Discoveries of Tribal Cultural Resources*.

Mitigation Measure TCR-2: Unanticipated Discoveries of Tribal Cultural Resources. Although surface level TCRs, including human remains, have not been identified for this project, Tribal consultation has shown that there is the potential for unidentified sites of cultural significance to be present in the subsurface context, near the Jackson Bulk Substation and associated offsite construction locations.

If any suspected TCRs or resources of Tribal cultural significance, including but not limited to features, anthropogenic/cultural soils, cultural belongings or objects

(artifacts), shell, bone, shaped stones or bone, or ash/charcoal deposits are discovered by any person during construction activities including ground disturbing activities, all work shall pause immediately within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. Work shall cease in and within the immediate vicinity of the find regardless of whether the construction is being actively monitored by a Tribal Monitor, cultural resources specialist, or professional archaeologist. A Tribal Representative from Wilton Rancheria shall be immediately notified and shall determine if the find is a TCR (PRC §21074). Evaluation and treatment will be performed in coordination with Tribes in accordance with SMUD's Inadvertent Discovery Plan.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. If redesign is determined to not be feasible, SMUD shall consult with Tribes to determine appropriate treatment of the find.

Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by Wilton Rancheria.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate Tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects and belongings, and reburial of cultural objects and belongings or cultural soil. The construction contractor(s) shall provide secure, on-site storage for culturally sensitive soils or objects that are components of TCRs that are found or recovered during construction. Only Tribal Representatives shall have access to the storage. Storage size shall be determined by the nature of the TCR and can range from a small lock box or jobsite work box to a conex box (shipping container). A secure (locked), fenced area can also provide adequate on-site storage if larger amounts of material must be stored.

The construction contractor(s) and SMUD shall facilitate the respectful reburial of the culturally sensitive soils or objects. This includes providing a reburial location that is consistent with the Tribe's preferences, excavation of the reburial location, and assisting with the reburial, upon request.

Any discoveries shall be documented on a Department of Parks and Recreation (DPR) 523 form within 2 weeks of the discovery and submitted to the appropriate CHRIS center in a timely manner.

Work at the TCR discovery location shall not resume until authorization is granted by the Lead Agency in coordination with the culturally affiliated Tribe.

If articulated or disarticulated human remains, or human remains in any state of decomposition or skeletal completeness are discovered during construction activities, the Sacramento County Coroner shall be contacted immediately. Upon determination by the Sacramento County Coroner that the find is Native American in origin, the Native American Heritage Commission will assign the Most Likely Descendent who will work with SMUD to define appropriate treatment and disposition of the burials.

For any work required to be undertaken in an area where shoring and or with hazardous materials, including soils, all archaeologists, Tribal Representatives, and Tribal Monitors shall meet the appropriate level of safety training (e.g., confined spaces, hazardous material exposure, etc.) in compliance with California Division of Occupational Safety and Health State and federal Occupational Safety and Health Administration requirements prior to entering construction work areas.

1.4 CEQA Determination

SMUD has determined that although the proposed project could have a significant effect on the environment, a significant effect would not occur with implementation of the aforementioned mitigation measures because the proposed mitigation measures would reduce the effects of any impacts to below the established thresholds of significance. Therefore, SMUD published the Draft IS/MND on May 5, 2026, and SMUD's Board of Directors will consider adoption of this Final IS/MND at a Board meeting on October 15, 2026.

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2.0 COMMENTS AND RESPONSES

2.1 Introduction

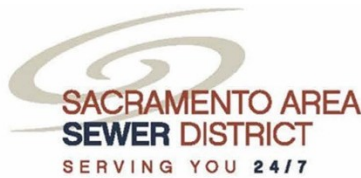
This section of the Final IS/MND contains comment letters received during the public review period for the Draft IS/MND. The Draft IS/MND for the Project was circulated for a 30-day public review period (May 5, 2026, to June 5, 2026).

2.2 Responses to Comments

During the public comment period, SMUD received five comment letters. Table 2-1 shows a list of commentors, the date of the comment, and assigns a letter number for reference in the comment responses.

Table 2-1. List of Commentors

Letter Number	Commenter (Agency/Organization/Individual)	Date
1	Chika Oya, SacSewer Development Services, Sacramento Area Sewer District	May 14, 2026
2	Jamie Silva, Environmental Program Manager, Central Valley Flood Protection Board	May 29, 2026
3	Harvey Tran, Senior Environmental Scientist, California Department of Fish and Wildlife	June 3, 2026
4	Sophia Markowskam, Senior California Representative, Defenders of Wildlife California Program Office	June 5, 2026
5	Michelle, C. St. Clair, MA, RPA, Executive Director of Cultural Preservation, Wilton Rancheria	June 5, 2026



Administrative Office
10060 Goethe Road
Sacramento, CA 95827
Tel 916.876.6000

EchoWater Facility
8521 Laguna Station Road
Elk Grove, CA 95758
Tel 916.875.9000

Letter 1

May 14, 2026

Sarah Ahmed
SMUD Environmental Services
P.O. Box 15830 MS B209
Sacramento, CA 95852-1830

**Subject: NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE
DECLARATION JACKSON BULK SUBSTATION PROJECT**
APN: 067-0050-039, -040

Dear Ms. Ahmed,

The Sacramento Area Sewer District (SacSewer) has reviewed the subject document.

The Jackson Bulk Substation Project is located on approximately 44 acres in unincorporated Sacramento County at the southeast corner of Excelsior Road and Jackson Road. The project site consists of two adjacent parcels, one located at 6037 Excelsior Road (APN 067-0050-039), and the other at 10590 Jackson Road (APN 067-0050-040) in Sacramento County, California. The Project area also includes linear corridors extending east, west, and south of the proposed substation that would be used for new or upgraded overhead lines.

The proposed project consists of the construction of an approximately 18-acre bulk substation. The proposed substation would convert high voltage from 230,000-volt (230kV) transmission lines to 69,000-volt (69kV) through transformers for local distribution into residential and commercial customers along the Jackson Highway corridor. Key features of the new substation include installation of new electrical equipment, a control building, driveway access, site fencing, lighting, stormwater drainage, and utilities. SMUD will also grade the remaining 26 acres for drainage improvements and maintain temporary soil storage south of the substation footprint. The substation will retain a 200-foot setback from Jackson Road and Excelsior Road.

In addition, the Project also includes construction of new or modified overhead power lines that would link the substation to the existing electrical grid. Planned overhead line improvements involve constructing approximately 0.7 miles of new 69kV overhead lines and converting approximately 5.35 miles of existing 12,000-volt (12kV) pole and overhead lines to single-circuit 69kV overhead lines with a 12kV underbuild. This work will require replacing the existing poles with taller, stronger poles.

SacSewer is not a land-use authority and plans and designs its sewer systems using information from land-use authorities. SacSewer bases the projects identified within its planning documents on growth projections provided by these land-use authorities.

In March 2021, the SacSewer Board of Directors approved the most current SacSewer planning document, the 2020 System Capacity Plan Update (SCP). In February 2013, the SacSewer Board of

1-1

Ms. Sarah Ahmed
May 14, 2026

Directors adopted the Interceptor Sequencing Study (ISS). The SCP and ISS are on the SacSewer website at [System Capacity Plans - Sacramento Area Sewer District \(sacsewer.com\)](https://www.sacsewer.com/system-capacity-plans-sacramento-area-sewer-district).

Customers receiving service from SacSewer are responsible for rates and fees outlined within the latest SacSewer ordinance. Fees for connecting to the sewer system recover the capital investment of sewer and treatment facilities that serve new customers. SacSewer does not guarantee sewer service or system capacity to the property until the property obtains proper permits to connect to the system and pays all facility impact (capacity) fees. The SacSewer ordinances are on the SacSewer website at [Ordinances - Sacramento Area Sewer District \(sacsewer.com\)](https://www.sacsewer.com/ordinances-sacramento-area-sewer-district).

SacSewer has the following comments on the Environmental Impact Report:

The subject property is outside of the SacSewer service area. As such, SacSewer has not planned, designed, or constructed facilities to provide service to the Project area. Contact the Environmental Management Department (EMD) for onsite waste disposal facilities, if necessary.

If you have any questions regarding these comments, please call me at (916) 875-9810.

Sincerely,

Chika Oya

Chika Oya
SacSewer Development Services

Y 1-1
(Cont.)

1-2

Letter 1. Chika Oya, SacSewer Development Services, Sacramento Area Sewer District, May 14, 2026

- 1-1 The comment provides introductory remarks to the comment letter, including a summary of the project description and SacSewer planning and permitting processes. This comment does not raise environmental issues or concerns regarding the adequacy, accuracy, or completeness of the environmental document. This comment is noted and no further response is necessary.
- 1-2 The comment notes that the project is outside of SacSewer's service area. This comment is noted and no further response is necessary.

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

GAVIN NEWSOM, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD3310 El Camino Ave., Ste. 170
SACRAMENTO, CA 95821
(916) 574-0609

May 29, 2026

Sarah Ahmed
SMUD Environmental Services
P.O. Box 15830 MS B209
Sacramento, CA 95852-1830
Sarah.Ahmed@smud.org**Subject: Comments for the Draft Initial Study and Mitigated Negative Declaration,
Jackson Bulk Substation Project, SCH# 2026050302, Sacramento County**

Dear Sarah Ahmed,

The Central Valley Flood Protection Board (Board) appreciates the opportunity to comment on the Draft Initial Study and Mitigated Negative Declaration (IS/MND) for the proposed Jackson Bulk Substation Project (proposed project).

2-1

The proposed project involves upgrading existing overhead lines crossing Elder Creek and Morrison Creek, both of which are regulated streams within the Board's permitting authority. Therefore, a Board permit may be required. Board permit information, including information on how to schedule a pre-application meeting with Board staff, is available on the [Permitting at the Central Valley Flood Protection Board website](#).

Please include the Central Valley Flood Protection Board permit regulatory setting under heading 2.6 Potential Permits and Approvals Required.

Responsibility of the Board

The Board is the State's regulatory agency responsible for enforcing appropriate standards for the construction, maintenance, and operation of the flood control system that protects life, property, and habitat in California's Central Valley.

2-2

The Board operates under authorities as described in California Water Code (Water Code), which requires the Board to oversee future modifications or additions to facilities of the State Plan of Flood Control (SPFC).

Board Permit

Per Title 23, Section 6, approval by the Board is required for all proposed work or uses, including the alteration of levees within any area for which there is an Adopted Plan of Flood Control within the Board's jurisdiction. In addition, Board approval is required for all proposed encroachments within a floodway, on adjacent levees, and within any Regulated Stream identified in Title 23, Table 8.1. Specifically, Board jurisdiction includes the levee section, the waterward area between project levees, a minimum 10-foot-wide strip adjacent to the landward levee toe, the area within 30 feet from the top of bank(s) of Regulated Streams, and inside the

2-3

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SMUD Environmental Services
May 29, 2026
Page 2

Board's Designated Floodways. Activities outside of these limits which could adversely affect Federal-State flood control facilities, as determined by the Board, are also under the Board's jurisdiction. Permits may also be required for existing unpermitted encroachments or where it is necessary to establish the conditions normally imposed by permitting, including where responsibility for the encroachment has not been clearly established or ownership or uses have been changed.

Y
2-3
(Cont.)**Flood Impacts Analysis**

Pursuant to Title 23, Section 15, the Board may deny a Board permit if the proposed project could:

2-4

- Jeopardize directly or indirectly the physical integrity of levees or other works,
- Obstruct, divert, redirect, or raise the surface level of design floods or flows, or the lesser flows for which protection is provided,
- Cause significant adverse changes in water velocity or flow regimen,
- Impair the inspection of floodways or project works,
- Interfere with the maintenance of floodways or project works,
- Interfere with the ability to engage in flood fighting, patrolling, or other flood emergency activities,
- Increase the damaging effects of flood flows,
- Be injurious to, or interfere with, the successful execution, functioning, or operation of any adopted plan of flood control, or
- Adversely affect the State Plan of Flood Control, as defined in the California Water Code

The Board, as a Responsible Agency under the California Environmental Quality Act (CEQA), will review and consider the environmental effects of the proposed project identified in the IS/MND, and will reach its own conclusions on whether and how to approve the project involved (14 CCR 15096, subd. (a)). This includes direct impacts to facilities under construction, as well as indirect impacts from the proposed project to surrounding facilities. Accordingly, the comments herein are intended to assist in the development of a robust CEQA document capable of supporting the Board's permitting process.

Closing

The potential risks to public safety, including increased flood risks, need to be considered when developing proposed projects that seek to modify flood control works or the hydrology of the water ways. Board staff is available to discuss any questions you have regarding the above comments. Please contact Jordan Robbins at (916) 524-3454, or via email at Jordan.Robbins@CVFlood.ca.gov if you have any questions.

2-5

Sincerely,

*Jamie Silva*Jamie Silva
Environmental Program Manager



Sacramento Municipal Utility District
Jackson Bulk Substation Project
October 2026

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SMUD Environmental Services
May 29, 2026
Page 3

cc: Office of Land Use and Climate Innovation
State.Clearinghouse@lci.ca.gov

Steve Lamb
Permitting Section Manager
Steve.Lamb@cvflood.ca.gov

Letter 2, Jamie Silva, Environmental Program Manager, Central Valley Flood Protection Board, May 29, 2026

- 2-1 The comment provides introductory remarks to the comment letter, including a summary of the project description and the Central Valley Flood Protection Board's (CVFPB) permitting jurisdiction. SMUD does not anticipate the need for a permit from CVFPB, as described further below in the response to comment 2-4.
- 2-2 The regulatory background and authority of the CVFPB is described. This comment is noted and no further response is necessary.
- 2-3 The CVFPB permit jurisdiction is described in more detail. This comment is noted and no further response is necessary.
- 2-4 As described in Section 3.10, "Hydrology and Water Quality" of the IS/MND, the 100-year floodplain of Elder Creek crosses the northwestern corner of the proposed substation site; however, the proposed substation and associated site development would be located outside of the floodplain. The project would maintain existing drainage patterns within the substation site and vicinity to avoid exacerbating flood hazards. Pole replacements within the floodplains of Elder Creek and Morrison Creek would be approximately the same size and occur in the same location as existing poles; thus, floodplain impacts are not anticipated from these installations. The CVFPB jurisdictional area maps were reviewed, and no federal or non-federal levees were observed in the project area. No changes to the IS/MND are required.
- 2-5 SMUD thanks CVFPB for their comment and interest in the proposed project. If further coordination is needed, SMUD will coordinate with the contact provided.



Sacramento Municipal Utility District
Jackson Bulk Substation Project
October 2026

6/15/26, 12:20 PM

Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

Letter 3

Outlook

[Draft] Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

From

Draft saved Mon 6/15/2026 12:18 PM

From: Tran, Harvey@Wildlife <Harvey.Tran@Wildlife.ca.gov>

Sent: Wednesday, June 3, 2026 5:54 PM

To: Sarah Ahmed <Sarah.Ahmed@smud.org>

Cc: Wildlife R2 CEQA <R2CEQA@wildlife.ca.gov>; Wood, Dylan@Wildlife <Dylan.Wood@wildlife.ca.gov>; Sheya, Tanya@Wildlife <Tanya.Sheya@wildlife.ca.gov>; Kilgour, Morgan@Wildlife <Morgan.Kilgour@Wildlife.ca.gov>

Subject: [EXTERNAL] CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

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.

Dear Sarah Ahmed:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Intent to Adopt an MND from Sacramento Municipal Utility District (SMUD) for the Jackson Bulk Substation Project (Project) pursuant the California Environmental Quality Act (CEQA) statute and guidelines.^[1]

3-1

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, native plants, and their habitat. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Fish & G. Code, § 1802.) Similarly for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, §

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6/15/26, 12:20 PM

Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

3-1
(Cont)**PROJECT DESCRIPTION SUMMARY**

The Project site is located at a 44-acre parcel at the southeast corner of Jackson Road and Excelsior Road in unincorporated Sacramento County. The two parcels consist of 6037 Excelsior Road, Sacramento (APN 067-0050-039) and 10590 Jackson Road, Sacramento (APN 067-0050-040).

The Project consists of the construction of a new bulk transmission substation and new or modified overhead 69kV subtransmission and 230kV transmission power lines that would link the substation to the existing grid. The new substation would include new electrical equipment, a control building, driveway access, site fencing, lighting, stormwater drainage, and utilities.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist SMUD in adequately identifying and, where appropriate, mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, CDFW concludes that a Mitigated Negative Declaration is appropriate for the Project.

CDFW is primarily concerned with the project impacts to Swainson's hawk (*Buteo swainsoni*), burrowing owl (*Athene cunicularia*), tricolored blackbird (*Agelaius tricolor*), and the two open water features.

COMMENT 1: Swainson's hawk Preconstruction Survey Radius, Special-Status Raptors and Nesting Birds, page number 3.4-25

3-2

Issue: The MND stated that a preconstruction survey for Swainson's hawk (SWHA) shall be conducted within 0.25-mile of the Project site. CDFW does not believe that the survey buffer is sufficient to capture project impacts on nearby active SWHA nests, especially in a rural setting. While 0.25-mile may be sufficient for an urban setting where traffic and development are more frequent for the SWHA to encounter, the Project site is not located in that same setting, and Project impacts may impact the SWHA farther than the 0.25-mile where the species is not acclimated to the increased construction noise.

Recommendation or Recommended Mitigation Measure: CDFW recommends that the relevant MND section be edited to follow the protocol in the "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" written by the Swainson's Hawk Technical Advisory Committee in May 31, 2000 which recommends that preconstruction surveys be conducted within a 0.5-mile radius of the Project site.

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Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

COMMENT 2: Swainson's hawk Avoidance, Minimization, and Mitigation Measures, Special-Status Raptors and Nesting Birds, page numbers 3.4-25 and 3.4-26

3-3

Issue: The MND states that there was an active SWHA nest within the Project site with three chicks fledging in July 2025. CDFW considers the SWHA nest active if it has been used within the last 5 years due to the species' high nest-site fidelity. The Project proposes to remove all 21 trees within the Project site, including the eucalyptus tree with the active SWHA nest. Removal of a SWHA nest is considered take under CESA. The MND does not include adequate minimization and mitigation measures for the loss of the existing nesting tree and the foraging habitat around it, which would be needed to demonstrate that the Project will mitigate for the take to reduce project impacts to a less-than-significant level under CEQA or meet CESA's fully mitigate definition. The MND only states in G-AMM18 Unanticipated Covered or ESA and CESA-Listed Species that a qualified biologist would capture and relocate the species. The G-AMM18 measure originates from the SMUD HCP which does not cover take of avian species including SWHA.

Recommendation or Recommended Mitigation Measure: CDFW recommends avoiding the existing nesting tree. If avoidance measures are not feasible, then CDFW recommends that the Project proponent consult with CDFW and demonstrate compliance with CESA. CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the CESA. CDFW recommends an incidental take permit (ITP) include SWHA if the Project has the potential to result in "take" (Fish & G. Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of the CESA-listed species, either through construction or over the life of the Project. To reduce project impacts to a less-than-significant level under CEQA and fully mitigate under CESA, the MND should include more detailed measures for how SMUD would minimize and mitigate the loss of a SWHA nesting tree and how SMUD would minimize and mitigate potential permanent and temporary impacts to the SWHA foraging habitat before construction commences. Minimization measures can include timing of tree removal to outside the species' nesting season and performance-based no disturbance buffers for nesting SWHA. Mitigation measures can include purchasing SWHA nesting and foraging mitigation credits from a CDFW-approved conservation bank, purchasing and placing a conservation easement on nearby biologically suitable, occupied SWHA nesting habitat, or any other method approved by CDFW. The additional measures should be incorporated into the appropriate MND section(s).

COMMENT 3: Burrowing Owl, Mitigation Measure BIO-11, page number 3.4-26

3-4

Issue: The MND states that the Project site has suitable burrows and foraging habitats for the burrowing owl (BUOW). The California Natural Diversity Database (CNDDB) shows a recorded occurrence of the species west of the Project site within one mile. Based on the occurrence and the suitable habitat, the Project site has a moderate probability of BUOW utilizing the site in either a nesting or wintering capacity. The MND states that if an active BUOW burrow is identified onsite and a non-disturbance buffer cannot be maintained, then coordination with CDFW will be completed. The MND does not provide further clarification of what that

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Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

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3-4
(Cont)

coordination would be and what possible mitigation measures will be needed in order to comply with both CEQA and CESA. The MND does not include mitigation measures for the possible take of an active burrowing owl nest to reduce project impacts to a less-than-significant level under CEQA. If a nesting BUOW is found onsite and proposed to be impacted, early consultation with CDFW is encouraged, as modifications to the proposed Project and mitigation measures may be required in order to obtain an ITP.

Please note that mitigation measures that are adequate to reduce impacts to a less-than-significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To facilitate the issuance of an ITP, CDFW recommends the MND include details pertaining to the permanent protection and perpetual management of compensatory habitat necessary to fully mitigate project-related impacts, both permanent and temporary. The type and amount of mitigation should be based on factors including an assessment of the importance of that habitat in the Project site, the extent to which covered activities will impact the habitat, and the estimate of the acreage required to provide for adequate compensation in coordination with CDFW.

Recommendation or Recommended Mitigation Measure: CDFW recommends the relevant MND section should be modified to state that if take of BUOW cannot be avoided, then CDFW recommends the Project proponent obtain an ITP and provide suitable mitigation that fully mitigates the Project impacts.

CDFW recommends the mitigation for the take of an active BUOW best be described in the relevant section of the MND. CDFW recommends that the mitigation ratio for BUOW habitat impacts is a minimum of 3:1 to offset the permanent loss of nesting habitat and 2:1 to offset the permanent loss of foraging habitat. CDFW also recommends that the mitigation for temporary impacts is no less than 1:1 for BUOW and their habitat to reduce project impacts to a less-than-significant level. CDFW recommends that mitigation is in the form of purchasing suitable mitigation credits from a CDFW-approved conservation bank, habitat restoration/enhancement onsite or offsite, partnership with other agencies or non-profit groups on suitable restoration projects, or other biologically suitable mechanisms pre-approved by the Lead Agency.

CDFW also recommends that the MND modifies the Mitigation Measures to include language to demonstrate that all feasible avoidance measures will be exhausted before allowing for eviction as a last resort after obtaining an ITP from CDFW. Example recommended language is provided below:

1. **Burrowing Owl Surveys.** Project proponent shall conduct a BUOW survey over all suitable habitat present within the Project site. BUOW surveys shall be conducted by a qualified biologist in accordance with the protocol described in the *Staff Report on Burrowing Owl Mitigation* (CDFW, March 7, 2012). If possible, surveys should be conducted during both the breeding (February 1 – August 31) and non-breeding seasons (September 1 – January 31) immediately preceding the planned start of construction activities to ascertain the seasonal residency status of any owls occupying the site. The presence of BUOW or their sign anywhere on

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Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

the site or within a 500-foot accessible radius around the Project site shall be recorded and mapped. Surveys shall disclose all burrows and occurrence of sign of BUOW on the Project site and within the 500-foot buffer. Results of the survey shall be submitted to SMUD.

3-4
(Cont)

2. Burrowing Owl Take Avoidance. During the breeding season (February 1 to August 31), surveys shall document whether BUOW are nesting in or within 500 feet of the Project area. During the non-breeding season (September 1 to January 31), surveys shall document whether BUOW are using habitat in or directly adjacent to any area to be disturbed. Survey results shall only be valid for the season (breeding or non-breeding) during which the survey was conducted. If a lapse in Project-related work of fifteen (15) calendar days or longer occurs, another focused survey and consultation with SMUD and CDFW shall be required before Project work can be reinitiated. If a BUOW or evidence of presence at or near a burrow entrance is found to occur within 500 feet of the Project site, the following measures shall be implemented:
 - 2.1 If BUOW are found during the non-breeding season (approximately September 1 to January 31), the Project applicant shall establish a minimum 160-foot (50-meter) buffer zone around active burrows. The buffer zone shall be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a qualified biologist confirms that such measures do not cause agitated behavior.
 - 2.2 If BUOW are found during the breeding season (approximately February 1 to August 31), the Project applicant shall:
 - a. Avoid all nest sites that could be disturbed by Project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging).
 - b. Establish a minimum 500-foot non-disturbance buffer zone around nests, unless otherwise approved by SMUD in writing, in consultation with CDFW. The buffer zone shall be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer will be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. Construction shall only occur within the 500-foot buffer zone during the breeding season if a qualified biologist monitors the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged and moved off site. Any modifications to this buffer shall be approved by SMUD, in consultation with CDFW prior to its

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Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

implementation. The buffer reduction request shall include relevant information and/or propose new measures to justify the buffer reduction. The buffer area must be clearly marked to prevent Project-related activities from occurring within the buffer zone.

3-4
(Cont)

3. **Eviction of Burrowing Owls.** If after all applicable avoidance and minimization measures are implemented and Project proponent needs to evict BUOW, an ITP shall be obtained for the activity and a BUOW eviction plan shall be developed by a qualified biologist for SMUD's review and approval, in consultation with CDFW. This plan, including its proposed mitigation, shall be consistent with the most recent available guidelines (e.g., *2012 Staff Report on Burrowing Owl Mitigation*). Burrow eviction shall only be conducted during the non-breeding season for burrows located in the Project footprint, and in limited instances within a buffer zone around the Project site, as determined by SMUD in consultation with CDFW after all avoidance and minimization measures have been exhausted.

COMMENT 4: Tricolored Blackbird, Mitigation Measure BIO-11, page number 3.4-26

3-5

Issue: The MND states that tricolored blackbirds (TRBL) were present within the Project site. CNDDDB shows numerous recorded occurrences of the species between 2014-2015 within one mile of the Project site. The aquatic features present within the Project contain suitable vegetation (e.g., broad-leaf cattail (*Typha latifolia*), common tule (*Schoenoplectus acutus* var. *occidentalis*), and willow (*Salix* spp.)) for the species to nest and forage. Due to the stock ponds and other depressional wetlands onsite, the species has a high probability of being present onsite during construction. However, the MND does not contain adequate avoidance, minimization, and mitigation measures to demonstrate that the Project will mitigate for possible take of the species to reduce project impacts to a less-than-significant level under CEQA or meet CESA's fully mitigate definition if take of the species is unavoidable. The only avoidance measure included in the MND was a preconstruction survey for the species within 100 feet of the Project site which has an inadequate survey radius.

Recommendation or Recommended Mitigation Measure: CDFW recommends the MND include more detailed measures for how SMUD would avoid, minimize and mitigate for potential permanent and temporary impacts to TRBL nesting habitat before construction commences. Avoidance measures can include a preconstruction survey with a 300 feet radius of the Project site. Minimization measures can include timing of removal of the vegetation to outside the species' nesting season and performance-based no disturbance buffers for nesting TRBL. Mitigation measures can include purchasing TRBL nesting mitigation credits from a CDFW-approved conservation bank, purchasing and placing a conservation easement on nearby biologically suitable, occupied TRBL nesting habitat, or any other method approved by CDFW. The additional measure should be incorporated into the appropriate MND section(s).

6/15/26, 12:20 PM

Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

CDFW recommends that the Project proponent consult with CDFW and demonstrate compliance with CESA. CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the CESA. CDFW recommends an ITP include TRBL if the Project has the potential to result in "take" (Fish & G. Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of the CESA-listed species, either through construction or over the life of the Project.

3-5
(Cont)**COMMENT 5: Impacts to Open Water Features, Section C., page number 3.4-31**

3-6

Issue: The MND states that the Project would involve the removal of the two open water features (pond/lake), their associated vegetation, and any other aquatic features that are hydrologically connected to the open water features, including season wetlands and vernal pools. These activities will require notification for a Streambed Alteration Agreement. This was not clearly stated in the MND. In addition, while the impacts to the vernal pools and the wetlands associated with the vernal pool tadpole shrimps are proposed to be mitigated through the SMUD HCP, no mitigation proposal was provided in the MND for the permanent loss of the open water/fringe habitat (stock ponds) or other aquatic resources. Only that it would be determined during the permitting process. As written, the mitigation in the MND does not reduce project impacts to a less-than-significant level under CEQA for the stock ponds and other aquatic features.

Recommendation or Recommended Mitigation Measure: CDFW recommends the MND clearly states that notification for a Streambed Alteration Agreement will be required for the removal of the two open water features (ponds/lakes), their associated vegetation, and any other aquatic features that are hydrologically connected to the open water features. The notification should include mitigation proposals for compensation to any permanent impacts to the aquatic features which may include the purchase of suitable mitigation credits at a 3:1 replacement to loss ratio, habitat restoration/enhancement onsite or offsite, habitat connectivity enhancements (wildlife crossings), partnership with other agencies or non-profit groups on restoration projects, or another mechanism pre-approved by CDFW.

ENVIRONMENTAL DATA

3-7

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link:
<https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be submitted online or mailed electronically to CNDDDB at the following email address:
CNDDDB@wildlife.ca.gov.

FILING FEES

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7/8



Sacramento Municipal Utility District
Jackson Bulk Substation Project
October 2026

6/15/26, 12:20 PM

Re: CDFW Comments on the MND for the Jackson Bulk Substation Project (SCH No. 2026050302)

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

3-7
(Cont)

CONCLUSION

3-8

Pursuant to Public Resources Code § 21092 and § 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to R2CEQA@wildlife.ca.gov.

CDFW appreciates the opportunity to comment on the MND for the Jackson Bulk Substation Project to assist SMUD in identifying and mitigating Project impacts on biological resources. CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. Questions regarding this letter or further coordination should be directed to Harvey Tran, Senior Environmental Scientist (Specialist) at (916) 358-4035 or harvey.tran@wildlife.ca.gov.

Sincerely,

Harvey Tran

Senior Environmental Scientist (Specialist)
California Department of Fish and Wildlife
Region 2 - North Central Region
1701 Nimbus Road, Rancho Cordova, CA 95670
Habitat Conservation Program
(916) 358-4035
harvey.tran@wildlife.ca.gov

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Letter 3. Harvey Tran, Senior Environmental Scientist, California Department of Fish and Wildlife, June 3, 2026

- 3-1 The comment provides introductory remarks to the comment letter, including an overview of CDFW's role, a project description summary, and a summary of comments and recommendations. This comment is noted and no further response is necessary.
- 3-2 The survey radius for Swainson's hawk will be expanded per this recommendation. Mitigation Measure BIO-10 has been modified, as shown in Section 3.0.
- 3-3 Avoidance of the tree containing the Swainson's hawk nest is infeasible due to its location within the planned substation footprint and the presence of other site constraints, such as the Elder Creek floodplain and mapped wetlands, that make alternative layouts infeasible. SMUD will coordinate with CDFW regarding nest relocation options and tree removal outside of the nesting season to demonstrate compliance with CESA. Mitigation Measure BIO-12 has been modified, as shown in Section 3.0, to include mitigation for permanent impacts to SWHA foraging habitat.
- 3-4 Mitigation Measure BIO-11 has been updated to reflect CDFW's recommendations for burrowing owl mitigation, as shown in Section 3.0.
- 3-5 Mitigation Measure BIO-10 has been updated to reflect CDFW's recommendations regarding survey buffer distances for tricolored blackbird, as shown in Section 3.0. Mitigation Measure BIO-10 already established tree removal windows outside of the nesting season and no-disturbance buffers as avoidance measures for tricolored blackbird. Compensation for permanent vernal pool impacts is required at a 3:1 ratio by Mitigation Measure BIO-2. Compensation for impacts to other wetland types that may provide suitable habitat for tricolored blackbird would be further defined through permitting with USACE and CDFW. These measures would also function to compensate for permanent impacts to tricolored blackbird nesting habitat. No mitigation measures have been added.
- 3-6 Section 2.6 (page 2-15) of the IS/MND states that a Lake and Streambed Alteration Agreement (LSAA) with CDFW may be required in connection with filling the stockponds, based on an assessment of their features. SMUD will conduct a detailed assessment prior to filling the stockponds to determine whether doing so would require obtaining an LSAA. If so, SMUD will secure the necessary agreement.
- 3-7 CNDDDB field survey forms will be prepared for detected special-status species. The appropriate filing fees will be paid when the Notice of Determination is filed.

- 3-8 SMUD thanks CDFW for their comment and interest in the proposed project.
SMUD will continue to coordinate with CDFW as design progresses.

Letter 4

California Program Office
P.O. Box 401, Folsom, California 95763
www.defenders.org

June 5, 2026

Sarah Ahmed
Sacramento Municipal Utility District
Planning and Natural Resources Department
6201 S Street, MS B209
Sacramento, CA 95852

Delivered via email to sarah.ahmed@smud.org

Re: Mitigated Negative Declaration for the Proposed Jackson Bulk Substation Project;
SCH No. 2026050302

Dear Ms. Ahmed,

Thank you for the opportunity to provide comments in response to the Mitigated Negative Declaration (MND) for the proposed Jackson Bulk Substation Project (Project). Defenders of Wildlife (Defenders) protects and restores America's wildlife at risk of extinction, advancing a vision of a future in which wildlife thrives, sustained by broad public support and a resilient network of healthy lands and waters and has nearly 2.1 million members and supporters in the United States, with more than 311,000 residing in California.

A low-carbon energy future is critical for California's economy, communities and environment. It is imperative that we consider the near-term impacts of energy development on our biodiversity, fish and wildlife habitat and natural landscapes while addressing the long-term impacts of climate change. Therefore, energy projects must be planned, sited, developed and operated to avoid, minimize and mitigate adverse impacts on wildlife and lands with known high-resource values.

The Jackson Bulk Substation Project, proposed by the Sacramento Municipal Utility District (SMUD) as lead agency, would construct a new 18-acre, bulk substation on a 44-acre site at the southeast corner of Jackson Road and Excelsior Road in unincorporated Sacramento County, with approximately 5.35 miles of rebuilt and 0.7 miles of new 69kV overhead lines. The substation site has been used historically for grazing and, since 2022, for temporary soil

4-1

National Headquarters | 1130 17th Street NW | Washington, DC 20036 | 202-682-9400

storage, and supports vernal pools, seasonal wetlands, vernal swales and two stock ponds in its southeastern half. The site lies within Preserve Planning Unit 3 of the South Sacramento Habitat Conservation Plan and within the permit area of the SMUD Operations, Maintenance, and New Construction Habitat Conservation Plan (SMUD HCP), under which federal incidental take authorization will be obtained.

4-1
(Cont)**Comments**

We offer the following comments on the MND for the proposed Project.

4-2

Project Reconfiguration

Table 3.4-2 of the MND discloses that the proposed substation footprint would result in 1.993 acres of permanent impact to seasonal wetland/seasonal swale and vernal pool. That is comprised of 0.172 acres for seasonal swale, 1.172 acres for seasonal wetland, 0.645 acres for vernal pool and 0.004 acres for vernal swale, in addition to 2.3 acres of permanent impact to open water and fringe. The vernal pool and seasonal wetland complex on the substation site is situated in a portion of Sacramento County where regional conservation planning has explicitly recognized that the remaining vernal pool resources are limited and that the loss of additional pools is a cumulative concern.

The MND states that the Project would develop an 18-acre substation footprint within the 44-acre site. The remaining 26 acres would be used for drainage improvements and continued temporary soil storage. The MND does not document any analysis of alternative substation footprint configurations or layouts within the 44-acre parcel that would have further reduced direct impacts to vernal pools, seasonal wetlands and seasonal swales. CEQA requires lead agencies to adopt feasible mitigation measures or alternatives that substantially lessen significant environmental effects.¹

Defenders requests that the final MND include a documented analysis of substation footprint reconfigurations that would relocate permanent features away from the highest-quality vernal pool, seasonal wetland and seasonal swale features within the 44-acre parcel. If a reconfigured footprint can avoid additional aquatic features without compromising SMUD's stated electrical system reliability objectives, the reconfigured layout should be adopted as the Project. Where reconfiguration cannot avoid all such features, the MND should disclose the rationale and identify which features cannot feasibly be avoided.

¹ Pub. Resources Code § 21002; 14 Cal. Code Regs. § 15021(a)(2)

Hydrology Analysis

4-3

The MND identifies a wetland avoidance area in the southeast corner of the proposed substation site, retaining approximately 0.252 acres of seasonal wetland, vernal swale, and other depressional wetland features. However, the document does not analyze how the grading of the surrounding substation footprint, the addition of impervious surfaces (crushed rock, concrete foundations, paved access roads), the capture and rerouting of stormwater through an underground storm drain system and the permanent loss of upgradient swales will affect the hydrologic regime of the preserved features.

Vernal pools, seasonal wetlands and swales depend on water that flows into them from the surrounding landscape, including rainfall and runoff from adjacent upland areas. The wetland features that the Project proposes to preserve in the southeast corner of the substation site are hydrologically connected to the broader site, including areas that would be graded, paved or otherwise developed under the Project. The MND does not analyze whether the preserved wetlands will continue to receive the water inputs they need once the surrounding site has been developed. The Hydrology and Water Quality section addresses surface water quality, downstream drainage and groundwater recharge at the site level but does not evaluate how Project-related changes to grading, runoff patterns and stormwater routing may alter the hydrology of the avoided wetland features themselves. A hydrology analysis that does not evaluate whether the preserved wetlands will continue to receive the surface and subsurface inputs that sustain them risks understating the indirect effects on those features and on the overall hydrology and the vernal pools that may depend on them. Indirect impacts must be analyzed under CEQA.²

Defenders requests that the final MND include a Project-specific hydrologic assessment of the wetland avoidance area that characterizes the contributing watershed area for each preserved feature under existing conditions, evaluates how Project grading, impervious surface placement, removal of upgradient swales and stormwater capture will alter the surface and subsurface hydrology of the preserved features, identifies design measures necessary to maintain the existing hydroperiod and water budget of those features and commits to those design measures as enforceable mitigation. If hydrologic maintenance of the preserved wetlands cannot be assured through Project design, the MND should disclose the resulting loss of function of the preserved wetlands as part of the Project's impact on aquatic resources.

² 14 Cal. Code Regs. §§ 15064(d), 15358).

Adequacy of Vernal Pool Surveys

4-4

The MND states that "[n]o vernal pool fairy shrimp or vernal pool tadpole shrimp were observed within the substation site during the 2025 visual surveys, though targeted aquatic sampling was not conducted." The document then assumes presence and assesses impacts to 1.993 acres of suitable habitat. While Defenders supports the approach of assuming presence, given the SMUD HCP's mitigation framework, the absence of protocol-level surveys understates the document's disclosure value and forecloses confirmation of species occupancy across the site's pool complex.

The USFWS provides survey protocols for listed large branchiopods, including vernal pool fairy shrimp and tadpole shrimp.³ Visual habitat assessments do not substitute for these methods; the existing biological record does not provide a complete account of species presence and distribution within the substation site. Defenders requests that the final MND document the completion of protocol-level vernal pool branchiopod surveys consistent with USFWS guidelines and report results.

Vehicle Access Through Vernal Pool Habitat

4-5

Measure VP-AMM1 directs that "SMUD field crews will avoid driving through SMUD HCP vernal pool, seasonal wetland and swale land cover to the maximum extent feasible." VP-AMM2 then describes alternatives if access through vernal pool land cover cannot be avoided, including matting, temporary bridges or alternative routes. The "maximum extent feasible" qualifier, without further specificity, leaves significant discretion to field crews to determine when vehicle access through vernal pool features is permissible. CEQA Guidelines § 15126.4(a)(1)(B) requires that mitigation measures be fully enforceable. The current formulation of VP-AMM1 is not adequately enforceable because it provides no criteria for when driving through vernal pool features may be deemed acceptable.

Defenders requests that VP-AMM1 be revised to prohibit vehicle access through SMUD HCP vernal pool, seasonal wetland and swale land cover except when prior written authorization has been obtained from CDFW and, for SMUD HCP Covered Species, from USFWS, an alternative means of access (matting, temporary bridges or alternate route) has been determined infeasible by a qualified biologist and a biological monitor is present during the access event.

³ US Fish and Wildlife Service. 2017. *Survey Guidelines for the Listed Large Branchiopods*.

Vernal Pool Mitigation Ratio for Temporary Impacts

4-6

Mitigation Measure VP-AMM6 commits to mitigating temporary impacts to vernal pool fairy shrimp and vernal pool tadpole shrimp habitat at a 0.5:1 ratio. As a general matter, Defenders recommends a minimum 1:1 ratio for temporary impacts to vernal pool habitat to ensure that the ecological functions are consistent with the no-net-loss principle that CDFW has applied in its review of vernal pool projects. The 0.5:1 ratio identified in BIO-2 reflects the framework established under the SMUD HCP, which provides the operative mitigation standard for the Project's federal incidental take coverage. Defenders recognized that a 0.5:1 ratio is acceptable under the HCP and highlights that temporary vernal pool impacts outside of the HCP, would result in the appropriate 1:1 ratio.

SMUD HCP Coverage Limitations and Open Water Impacts

4-7

The MND relies on the SMUD HCP as the operative mitigation framework for the Project's biological resource impacts. The SMUD HCP provides take authorization under Section 10 of the federal Endangered Species Act and is limited to species it covers; the SMUD HCP does not provide take authorization for Swainson's hawk and burrowing owl and does not address open water and fringe land cover present on the substation site.

The Project would result in 2.30 acres of permanent impact to open water and fringe land cover, including the two stock ponds where suitable tricolored blackbird habitat occurs. Mitigation Measure BIO-2 provides compensation for vernal pool branchiopod habitat only at SMUD HCP-specified ratios; mitigation for impacts to the open water and fringe is not addressed under the SMUD HCP framework and is deferred to future Clean Water Act Section 401, Section 404 and California Fish and Game Code Section 1602 permitting. Deferral of mitigation to future permitting without specific performance standards does not satisfy CEQA's substantive requirements.⁴ The cumulative permanent impact of the Project to aquatic resources (open water and fringe, seasonal wetland, vernal pool, seasonal swale and vernal swale) totals 4.29 acres, approximately 10 percent of the Project's total permanent disturbance of 43.67 acres. This is a substantial concentration of impacts on aquatic resources, which warrants a mitigation framework addressing each aquatic resource type, not solely the vernal pool habitat covered by the SMUD HCP.

Defenders requests that the final MND include enforceable mitigation measures with specific performance standards for impacts to the 2.30 acres of open water and fringe habitat, not deferred to future permitting.

⁴ *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70.

Swainson's Hawk

An active Swainson's hawk nest has been observed on the substation site, with a pair of adult hawks successfully fledging three young from a eucalyptus tree near the center of the proposed footprint in 2025. All 21 trees within the substation site, including the documented nest tree, would be removed for Project construction. The SMUD HCP does not include Swainson's hawk among its Covered Species and provides no take authorization for this species.

4-8

Mitigation Measure BIO-10 directs pre-construction nesting bird surveys within 0.25 mile of construction activities between February 1 and August 31. While this addresses individual nest disturbance during the nesting season, it does not address the permanent loss of an established nest tree that has produced young within the immediately preceding breeding season. Swainson's hawks demonstrate strong nest site fidelity, and the loss of a documented productive nest site reduces the local breeding capacity. CDFW guidance recommends mitigation for the loss of foraging habitat and disturbance to active nests but does not directly address the permanent loss of an active nest tree, the circumstance presented here, which warrants direct CDFW consultation.⁵

Defenders recommends that the Project be reconfigured to avoid removal of the documented Swainson's hawk nest tree, either through modification of the substation footprint within the 44-acre parcel or through siting at an alternative location. Avoidance of the documented active nest tree is preferable to compensatory mitigation. If avoidance cannot be achieved, Defenders requests consultation with CDFW prior to removal of the nest tree and the inclusion of enforceable mitigation measures, including compensatory mitigation through replacement nest trees, foraging habitat compensation consistent with the 1994 CDFW Staff Report,⁶ and Swainson's hawk-specific protocol surveys consistent with CDFW survey methodology prior to ground disturbance to confirm continued use of the site.

Tricolored Blackbird

Tricolored blackbirds were observed foraging within the Project area, and the MND identifies marginally suitable nesting habitat consisting of cattails and young willows at the edges of the two stock ponds within the proposed substation site. The Project would permanently impact 2,300 acres of open water and fringe habitat, including the stock pond margins. The

4-9

⁵ California Department of Fish and Wildlife. 1994. *Mitigation for Impacts to Swainson's Hawks in the Central Valley of California*.

⁶ Ibid.

SMUD HCP does not include tricolored blackbird among its Covered Species and provides no take authorization for this species; CESA take authorization from CDFW is therefore required.

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4-9
(Cont)

Mitigation Measure BIO-10 addresses general nesting bird surveys but does not include species-specific protocols for tricolored blackbird. Given the documented foraging use of the site, the loss of marginally suitable nesting habitat at the stock ponds and recent tricolored blackbird occurrences in the surrounding area, species-specific surveys are warranted in advance of construction. Defenders requests that the final MND commit to CESA take coverage for tricolored blackbird, require species-specific protocol-level tricolored blackbird surveys covering both foraging and potential nesting habitat and commit to species-specific avoidance, minimization and mitigation measures if breeding colonies or sustained foraging use is confirmed.

Conclusion

Thank you once again for the opportunity to provide scoping comments on the proposed Jackson Bulk Substation Project and for considering our comments. Defenders looks forward to reviewing the Final MND for the Project and requests notification when it is available. Please feel free to contact me with any questions.

4-10

Respectfully submitted,

Sophia Markowska

Sophia Markowska
Senior California Representative
SMarkowska@defenders.org

*Letter 4. Sophia Markowskam, Senior California Representative, Defenders of Wildlife
California Program Office, June 5, 2026*

- 4-1 The comment provides introductory remarks to the comment letter, including a mission statement and project description summary. This comment is noted and no further response is necessary.
- 4-2 The comment requests consideration of alternative site configurations within the 44-acre site to maximize avoidance of wetland impacts. Following the completion of aquatic, biological, and other site surveys, SMUD assessed various substation configurations at the project site to reduce impacts on environmentally sensitive areas.

The site constraints significantly influence the location and design of the substation infrastructure. The substation has been strategically positioned on a property adjacent to existing transmission infrastructure to avoid the high costs and logistical challenges associated with extending new transmission lines and to minimize the need for extensive new infrastructure. Several site constraints—such as wetlands, floodplain, setback requirements, and visual impacts—also had to be considered.

- Wetlands and Vernal Pools: The site intersects with seasonal wetlands and vernal pools. Efforts have been made to avoid impacting the existing vernal pools to the greatest extent feasible. See Figure 2.2-1 on page 2-57, which shows the conceptual grading and drainage plan and mapped wetlands, including the wetland avoidance area.
- Floodplain: The northwestern corner of the site crosses the 100-year floodplain of Elder Creek, which limits the placement options in that area.
- Setback Requirements: The County requires a 200-foot setback from the roadway, which occupies approximately 14 acres of the site, further constraining the available space.
- Visual Impact: The visibility of the substation from public roadways was also a consideration in determining the conceptual footprint, aiming to minimize visual impacts.

Based on that detailed assessment, it was determined that no feasible alternative configurations would substantially reduce wetland impacts without compromising SMUD's project objectives or resulting in other environmental or community impacts.

Please refer to Section 2.3.1, "SMUD Bulk Substation Site Selection Guidelines" in the IS/MND for more detailed information on site selection criteria and constraints.

- 4-3 The comment requests additional analysis supporting the viability of wetlands that would be protected under the proposed project. Figure 2.2-1 on the following page shows the conceptual grading and drainage plan and mapped wetlands, including the wetland avoidance area. As shown on the figure, the proposed project would modify internal drainage patterns within the site by constructing new drainage ditches and inlets to capture and convey runoff. However, stormwater runoff would continue to be conveyed toward the northwest corner of the site and an existing drainage swale that ultimately discharges into Elder Creek. The proposed project would not change the topography of the site and surroundings; as shown by the contours on Figure 2.2-1, drainage flows would continue to travel downgradient toward Elder Creek and provide hydrologic input to the retained vernal pools. The wetland avoidance area would also continue to receive stormwater flows that infiltrate through the upstream pervious surfaces bordering this area. The wetland avoidance area would also be considered during final design of the stormwater drainage system. In addition, detailed hydrologic studies to inform wetland mitigation will be completed as needed to support wetland permitting.

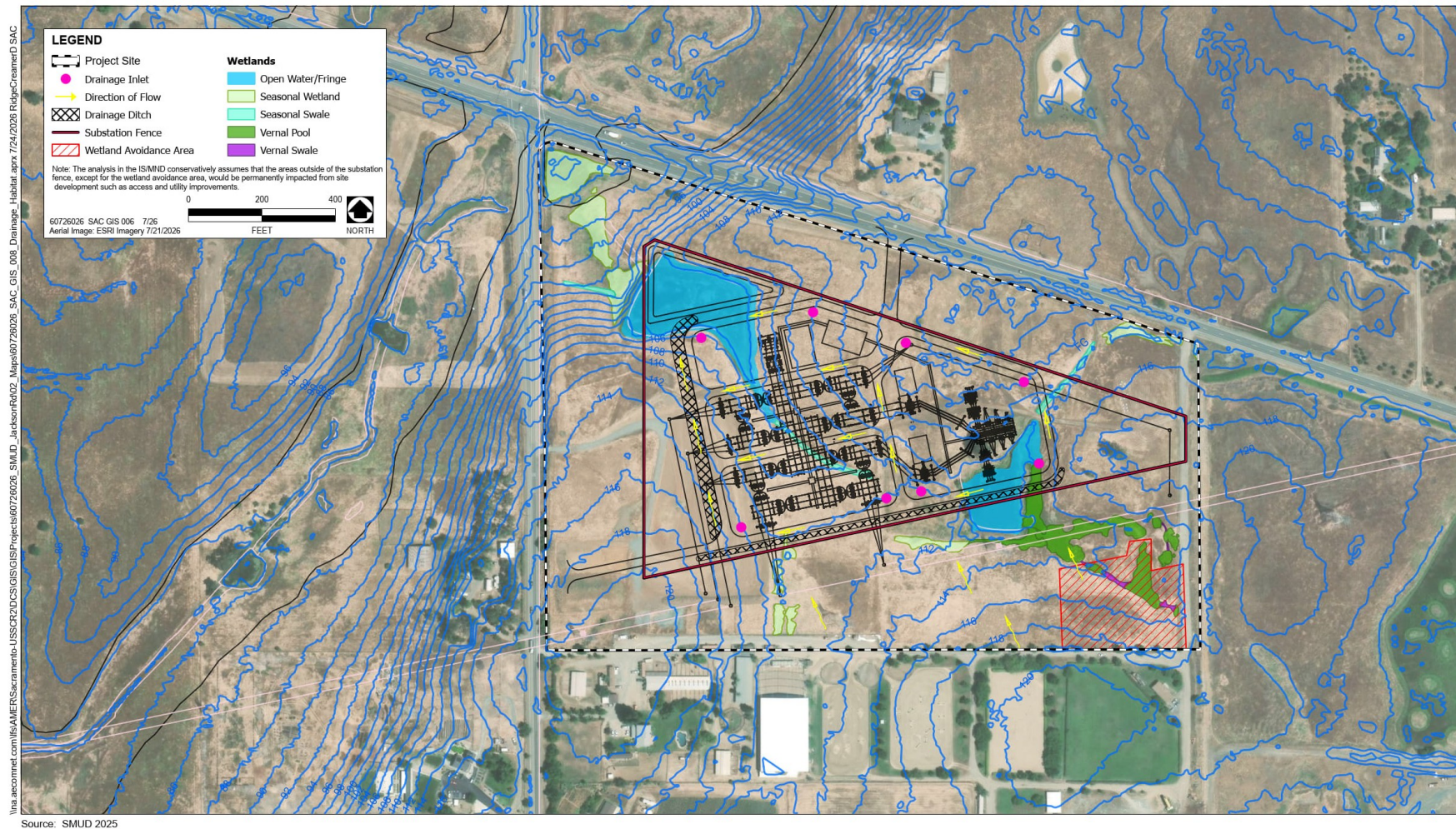


Figure 2.2-1: Conceptual Grading and Drainage Plan

- 4-4 Consistent with the SMUD HCP framework, the IS/MND conservatively assumes presence of vernal pool branchiopods and assesses impacts to the full 1.993 acres of suitable habitat at the substation site. Because presence is assumed and impacts are avoided, minimized, and compensated under the SMUD HCP regardless of occupancy, protocol-level surveys would not alter the impact conclusion or the required compensation under Mitigation Measure BIO-2. No changes to the IS/MND are required.
- 4-5 The comment requests that VP-AMM1 be revised to prohibit vehicle access through vernal pool, seasonal wetland, and swale land cover except under specified conditions. Mitigation measures VP-AMM1 and VP-AMM2 are avoidance and minimization measures (AMMs) from the approved SMUD HCP and its associated federal and state incidental take permits, which are enforceable as permit conditions and have been reviewed and approved by regulatory agencies. These measures outline a stepwise process which prioritizes avoidance, then minimization of effects using specific methods in coordination with SMUD Environmental Services, and finally, detailed tracking and mitigation consistent with the SMUD HCP conservation strategy. These AMMs are adequately enforceable and include the presence of a qualified biologist onsite to monitor covered activities and ensure compliance with HCP AMMs. Thus, no changes to the IS/MND are required.
- 4-6 This comment is noted. The 0.5:1 mitigation ratio is in relation to temporary disturbance of vernal pools. The conservation strategy of SMUD's HCP was prepared to meet the regulatory requirements of the federal Endangered Species Act and the California Endangered Species Act. HCPs must fully offset take to the maximum extent practicable as described in the Habitat Conservation Planning and Incidental Take Permit Processing Handbook.

SMUD will also mitigate for estimated indirect impacts on covered vernal pool crustaceans at a 1:1 ratio within 250 feet of the substation. New substation construction could indirectly affect vernal pool invertebrates by altering the hydrology that supports their habitat (e.g., altering surface runoff patterns, breaking through hardpan or claypan restrictive layers), increasing human intrusion, introducing invasive species, and causing pollution; therefore, per SMUD's HCP indirect impacts will be mitigated at a 1:1 ratio. Mitigation Measure BIO-2 has been updated with these details, as shown in Section 3.0.

- 4-7 As described in Mitigation Measure BIO-2, wetland impacts will be compensated at approved ratios identified in the SMUD HCP for vernal pools or as further defined through regulatory agency permitting. SMUD will obtain Regional Water Quality Control Board authorization for impacts to Waters of the State (e.g., Waste Discharge Requirements under the Porter Cologne Water Quality Control

Act). Currently, the specific mitigation requirements for these wetland impacts are not known but are anticipated to be replacement or restoration at a 1:1 or greater ratio.

- 4-8 Refer to Response to Comment 3-3.
- 4-9 Refer to Response to Comment 3-5.
- 4-10 SMUD thanks Defenders of Wildlife for their comments and interest in the proposed project.

**WILTON RANCHERIA**
THE CAPITAL TRIBE**Letter 5**

June 5, 2026

Sarah Ahmed
SMUD Environmental Services
PO Box 15830 MS B209
Sacramento, CA 95852-1830
Sarah.Ahmed@smud.org

Subject: Public Comment on Draft Initial Study/Mitigated Negative Declaration – Jackson Bulk Substation Project

Dear Ms. Ahmed:

On behalf of Wilton Rancheria, we submit the following comments on the Draft Initial Study/Mitigated Negative Declaration (“IS/MND”) for the proposed Jackson Bulk Substation Project (“Project”) located on approximately 44 acres in unincorporated Sacramento County.

Wilton Rancheria (“Wilton Rancheria” or the “Tribe”) is a federally recognized Tribe with deep ancestral ties to the Project area, which lies within the Tosewin landscape, a region that has sustained our people since time immemorial and continues to hold cultural, spiritual, and historical importance to our Tribal citizens today. The Tribe has been engaged in Assembly Bill 52 (“AB 52”) consultation with SMUD regarding this Project and considers that consultation to be open and ongoing.

Tribal Cultural Resources

The Tribe remains concerned about the Project’s potential to result in significant impacts to Tribal Cultural Resources (“TCRs”). As acknowledged in the IS/MND, Project activities including ground disturbance, grading, trenching, and construction have the potential to adversely affect cultural materials, landscapes, and places of ongoing Tribal significance.

As Wilton Rancheria has previously shared with SMUD, we believe it is highly likely that SMUD will encounter buried cultural resources during ground disturbing activities at the site. The fact that no resources were discovered during pedestrian surveys provides no information about whether there will be buried resources once ground disturbance commences. Boot scrapes are usually used during pedestrian surveys to scrape

5-1

5-2



WILTON RANCHERIA

THE CAPITAL TRIBE

vegetation off the surface in order to expose the soil, but those are superficial and only go an inch or two into the ground. Reports from Schenk and Dawson and other early archaeologists note that archaeological mounds sometimes extend five to nine feet below the current ground surface. Further, in an alluvial environment, mounds and other sites would easily be covered by alluvial soils. Many sites within the Delta have been covered by such alluvial deposits over time. We have knowledge of several sites that are buried, and buried up to several meters deep, within the Delta and adjacent landscapes. See the attached, *confidential* Exhibit A for further discussion.

While Wilton Rancheria has engaged in good-faith consultation and has shared relevant Tribal knowledge regarding the sensitivity of the Project area, the mitigation measures proposed in the IS/MND are insufficient to ensure meaningful protection of Tribal Cultural Resources. See the attached, *confidential* Exhibit A for further discussion. As a reminder, AB 52 requires consideration of a tribe's "expertise concerning their tribal cultural resources." Pub. Res. Code § 21080.3.1(a); *Koi Nation of Northern California v. City of Clearlake* (2025) 109 Cal.App.5th 815, 825.

In particular:

- Spot-check monitoring is not an acceptable mitigation measure. Intermittent or limited monitoring does not adequately address the level of risk identified in the IS/MND itself. Where a project is acknowledged to have potentially significant impacts, mitigation must be robust enough to reduce those impacts to a less-than-significant level.
- The Tribe has formally requested full-time Tribal cultural monitoring during all ground-disturbing activities. To date, SMUD has declined to include this measure in the IS/MND.
- Without continuous monitoring, the Tribe's ability to protect and steward its heritage is unduly constrained by project scheduling and oversight decisions made by the applicant.

One reason why spot check monitoring is insufficient to reduce impacts to cultural resources is because it provides no opportunity for the Tribe to pause construction activities immediately upon identifying a buried resource. As a result, it would allow significant disturbance of buried resources before those resources are even identified. The

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(Cont)





WILTON RANCHERIA

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disruption of resources itself constitutes harm, including from loss of integrity. According to the National Register of Historic Places, Bulletin 15, “The assessment of integrity for properties considered eligible for information potential depends on the data requirements of the applicable research design. . . .It is important that the significant data contained in the property remain sufficiently intact to yield the expected important information, if the appropriate study techniques are employed.”¹ Disturbing resources could impact their integrity and thus their eligibility for listing.

In addition, disturbing resources constitutes a cultural harm. Native communities have systemically been removed from ancestral territories and prevented from celebrating, practicing, and protecting their tangible and intangible heritage. As opposed to full-time monitoring, where the tribal monitor can halt damage as soon as it begins, spot-check monitoring would allow much more disturbance and damage. This is a significant impact that the IS/MND’s measures fail to mitigate.

Given these potentially significant impacts, the mitigation proposed in the IS/MND will not reduce impacts to a less-than-significant level.

Full-time tribal monitoring during ground-disturbing is clearly feasible. Many agencies have provided full-time tribal monitoring during ground-disturbing activities when presented with similar (or even less) evidence about the likelihood of encountering buried resources. See the table below for examples. SMUD has not explained why the Tribe’s reasonable request for full-time monitoring is infeasible or was otherwise rejected as a mitigation measure. This failure renders the IS/MND insufficient under CEQA, and falls short of AB 52’s consultation requirements.

<i>Project</i>	<i>Lead agency</i>
Kiefer Landfill Gas Utilization ²	Sacramento County
Middle-Mile Broadband Network ³	Caltrans

¹ Emphasis in original. Accessed at https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf.

² <https://planningdocuments.saccounty.net/projectdetails.aspx?projectId=7464&communityID=4>

³ <https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs/d123-broadband>

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Creekside at Woodlake ⁴	City of Sacramento
East County Service Center ⁵	Contra Costa County
Harvest Water ⁶	Sacramento Area Sewer District
Lower San Joaquin Multi-Benefit Project ⁷	Reclamation District No. 341
Aspen VIII and IX Mining Use Permit Amendment ⁸	Sacramento County
Eakle Water Storage Reservoir Grading ⁹	Napa County
Shiloh West Medical Offices ¹⁰	City of Victorville
Bonnani Residential Project ¹¹	City of Fountain Valley

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The Tribe respectfully asks: How can Wilton Rancheria effectively protect its cultural heritage if it is not afforded consistent access to observe and respond to ground disturbance in real time?

Further, the IS/MND states generally that a “Tribal Representative from a California Native American Tribe that is traditionally and culturally affiliated with a geographic area” shall be notified and shall determine whether a find is a TCR. IS/MND at 3.18-10. The IS/MND confirms that other Tribes notified of AB 52 consultation have not requested consultation or have declined to consult. *Id.* at 3.18-1. Accordingly, the IS/MND should identify Wilton Rancheria as the appropriate tribe for monitoring and potential resource discoveries.

SMUD must revise the IS/MND to require:

- Full-time, on-site Tribal cultural monitoring by qualified Tribal representatives during all ground-disturbing activities;
- Wilton Rancheria’s participation in evaluation and treatment decisions; and

⁴ <https://ceqanet.lci.ca.gov/2025080200>

⁵ <https://ceqanet.lci.ca.gov/2026011121>

⁶ <https://www.sacsewer.com/harvest-water/>

⁷ <https://water.ca.gov/Programs/All-Programs/Multibenefit>

⁸ <https://ceqanet.lci.ca.gov/Project/2015022062>

⁹ <https://ceqanet.lci.ca.gov/2025010729>

¹⁰ <https://ceqanet.lci.ca.gov/2024101315>

¹¹ <https://ceqanet.lci.ca.gov/2023030610>





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- Ongoing coordination with the Tribe consistent with AB 52 consultation obligations.

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Biological Resources and Tribal Cultural Landscapes

5-3

Wilton Rancheria is also concerned about the Project's potential impacts to biological resources, which are inextricably linked to Tribal cultural values and practices.

The Project site and surrounding areas include vernal pools and wetlands, which provide critical habitat for sensitive and listed species. The area is also known to support culturally significant wildlife, including:

- Swainson's hawk
- Tricolored blackbird
- Other native bird and animal species of importance to the Tribe

For Wilton Rancheria, these species and their habitats are not merely biological resources; they are part of a living cultural landscape and are appropriately understood as Tribal Cultural Resources.

The degradation or fragmentation of these habitats represents a cultural impact as well as an environmental one.

The Tribe urges SMUD to:

- Strengthen mitigation measures to ensure avoidance and minimization of impacts to vernal pools and wetlands;
- Incorporate Tribal input into biological resource management and monitoring plans; and
- Evaluate impacts to culturally significant species and habitats through a Tribal Cultural Resources lens, in addition to standard biological criteria.

5-4

Other Biological Resources Concerns

SMUD relies in part on its Operations, Maintenance, and New Construction Habitat Conservation Plan¹² ("HCP") to mitigate its impacts on biological resources. E.g., IS/MND

¹² The IS/MND lists a July 2024 version in its References. We could not find a copy of this version, and instead reference the version submitted to the Federal Register in December 2023, accessed here: <https://www.regulations.gov/document/FWS-R8-ES-2023-0191-0002>.



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at 3.4-15 (“The SWPPP, SMUD HCP general and species-specific avoidance and minimization measures (AMMs), and mitigation measures described below would reduce potential impacts on vernal pool branchiopod species.”). However, this reliance is flawed due to conflicts with the HCP, which constitute a significant impact.

According to the IS/MND, 43.666 acres at the proposed substation site will be permanently impacted. *Id.* at 3.4-13. Further, each new pole replacement/installation will temporarily or permanently disturb 3.14 square feet. *Id.* It is unclear how many poles will be replaced or installed in the 5.35 miles of rebuilt overhead lines and 0.7 miles of new overhead lines, but the amount only adds to the total acres permanently impacted. *Id.* at 2-10.

The HCP assumed that four new transmission substations would be constructed during the 30-year Incidental Take Permit term, and that “[p]ermanent effects would total 11 acres per substation (44 acres over the 30-year permit term).” HCP at 59-60. At minimum, the Project already impacts over 43 acres, reaching or exceeding the HCP’s threshold just a few years into the 30-year term. Since this Project, as proposed, upends the assumptions on which the HCP is based, SMUD cannot rely on the HCP, and SMUD’s mitigation of the Project’s impacts is insufficient.

SMUD’s implementation of the HCP uses a “five-year stay-ahead approach”:

At the beginning of each 5-year phase, SMUD will estimate the amount of habitat impact that is anticipated for each species during that phase, and will secure the total amount of mitigation necessary prior to the occurrence of any impacts for that phase. If, at any time during the 5-year phase, SMUD anticipates exceeding the estimated impact amount, SMUD will secure the necessary mitigation to ensure that the mitigation occurs ahead of the impact.

HCP at 287. Since the permit was approved in late 2024¹³, SMUD is still in the first five-year phase, for which it should have estimated and secured mitigation in the first year. Since this Project exceeds SMUD’s assumed impacts, under its own HCP, SMUD cannot begin construction without *first* securing adequate mitigation, or showing that it already has. The IS/MND does not make this showing. Thus, the IS/MND does in fact conflict with the HCP’s

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¹³ SMUD, 2024 Sustainability Report, <https://www.smud.org/Corporate/Environmental-Leadership/2024-Sustainability-Report>.



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stay-ahead approach, contrary to SMUD’s claims otherwise. See IS/MND at 3.4-34. Therefore, there is a significant impact on Biological Resources under subsections a and f, the IS/MND is insufficient under both CEQA and the HCP, and an EIR is required.

Impermissible Deferral of Mitigation Measures

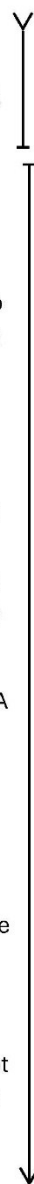
Additionally, throughout the IS/MND, SMUD impermissibly defers mitigation measures. “Formulation of mitigation measures should not be deferred until some future time.” CEQA Guidelines § 15126.4(a)(1)(B). However, where mitigation for an impact “is known to be feasible,” but where “practical considerations prohibit devising such measures early in the planning process,” an agency “can commit itself to eventually devising mitigation measures that will satisfy specific performance criteria articulated at the time of project approval.” *Cleveland Nat. Forest Foundation v. San Diego Assn. of Govs.* (2017) 17 Cal.App.5th 413, 442-43. In order to defer formulation of mitigation measures, therefore, an agency must demonstrate (a) that mitigation of the impact is feasible; (b) that practical considerations preclude devising measures at the time of review; (c) specific, articulated performance criteria that will avoid or lessen the impact; and (d) a binding commitment to adopt measures that will meet or exceed those performance standards. Here, the IS/MND does not meet these criteria in numerous areas.

The mitigation measures proposed for TCRs constitute impermissible deferral under CEQA because they lack the specific performance criteria required to make deferral lawful. The IS/MND’s TCR mitigation measures fall short of this standard in two critical respects.

First, the TCR mitigation measures invoke “feasibility” as a limiting principle without defining what feasibility means in operational terms. IS/MND at 3.18-10. Mitigation measures that condition implementation on a finding of feasibility without specifying objective criteria for making that determination do not constitute enforceable performance standards. See *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 (improper deferral where mitigation measure lacked specific performance standards or guidelines). At minimum, the IS/MND should specify an objective standard for feasibility with respect to TCR mitigation—for example, that the cost of a proposed measure shall not exceed a defined percentage of total project cost. Without such a standard, SMUD retains unfettered discretion to deem any protective measure “infeasible,” rendering the mitigation commitment meaningless.

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Second, the TCR mitigation measures rely in part on an Inadvertent Discovery Plan (“IDP”) as a mechanism for responding to unanticipated finds during ground-disturbing activities. IS/MND at 3.18-10 (“Evaluation and treatment will be performed in coordination with Tribes in accordance with SMUD’s Inadvertent Discovery Plan.”). However, this plan is not included in the IS/MND and has not been made available for public or Tribal review. Mitigation that depends on the future preparation of a plan, without committing to specific standards the plan must satisfy, is precisely the kind of deferred mitigation that CEQA prohibits. See *Preserve Wild Santee v. City of Santee*, 210 Cal.App.4th at 281. The IS/MND must either include the IDP as a completed document, or at minimum articulate specific, binding standards that the IDP will be required to incorporate. Without these specifics, the Tribe has no assurance that the IDP provides meaningful protection for TCRs.

The IS/MND also impermissibly defers mitigation by relying on a Stormwater Pollution Prevention Plan (“SWPPP”) to address impacts in several resource areas, including biological resources. See, e.g., IS/MND at 3.4-15. The SWPPP has not yet been prepared and is not part of the record, and the IS/MND does not specify what the SWPPP will require or what performance standards it will meet. To satisfy CEQA, the IS/MND must articulate the performance standards the SWPPP must achieve with respect to each impact it is intended to mitigate.

Cumulative Impacts

Finally, the IS/MND’s cumulative impacts analysis is inadequate as to both TCRs and biological resources. An IS/MND should evaluate whether a project’s impacts, when combined with the impacts of other past, present, and reasonably foreseeable projects, may result in a significant cumulative effect. See CEQA Guidelines Appendix G, Evaluation of Environmental Impacts, ¶ 2. The IS/MND does not meet this standard.

With respect to TCRs, the Project lies within the Tosewin landscape, a region of immense cultural significance to Wilton Rancheria that has been subject to centuries of cumulative degradation through colonization, development, and ongoing ground disturbance. The Project does not exist in isolation; it is one of many infrastructure projects that have impacted, and will continue to impact, TCRs within the Tribe’s ancestral territory. The IS/MND acknowledges multiple other projects in the area, but its cumulative impacts analysis fails to grapple with the incremental loss of TCRs that each additional project

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5-6





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causes upon this culturally rich landscape. Accordingly, it cannot support a finding that cumulative impacts to TCRs are less than significant.

With respect to biological resources, the cumulative analysis is similarly deficient. The Project's sensitive habitat areas are already under pressure from regional development and climate change. The IS/MND's reliance on the HCP to address cumulative biological impacts is insufficient for the reasons discussed above: the Project alone may exhaust a significant portion of the HCP's assumed permanent impact acreage for substations, meaning that the HCP's framework for managing cumulative regional impacts is already strained. The IS/MND must be revised to include a meaningful cumulative impacts analysis for biological resources, and must demonstrate that the Project's mitigation measures are sufficient to address the cumulative degradation of the biological resources at stake. If not, an EIR must be prepared.

Conclusion

Wilton Rancheria appreciates the opportunity to comment and acknowledges that consultation with SMUD remains ongoing. However, the Tribe cannot support the IS/MND in its current form without stronger, enforceable mitigation measures, particularly with respect to Tribal cultural monitoring and protection of sensitive cultural landscapes.

We respectfully request that SMUD:

1. Commit to full-time Tribal cultural monitoring during all ground disturbance and eliminate reliance on spot-check monitoring;
2. Strengthen protections for biological resources that function as Tribal Cultural Resources;
3. Develop specific feasibility standards for mitigation measures;
4. Secure mitigation ahead of impacts;
5. Prepare an EIR if all impacts cannot be reduced to a less-than-significant level; and
6. Continue to engage in good-faith AB 52 consultation to resolve these concerns prior to project approval.

Wilton Rancheria remains committed to working collaboratively with SMUD to ensure that the Tribe's cultural heritage, resources, and values are appropriately respected and protected.

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Respectfully,



Michelle C. St. Clair, MA, RPA
Executive Director of Cultural Preservation
Wilton Rancheria

Exhibit A : Additional Confidential Information



*Letter 5. Michelle C. St. Clair, MA, RPA, Executive Director of Cultural Preservation,
Wilton Rancheria, June 5, 2026*

- 5-1 The comment provides introductory remarks and describes the ongoing AB 52 consultation between SMUD and Wilton Rancheria.
- 5-2 SMUD and Wilton Rancheria engaged in sincere, timely, and collaborative discussions to address potential impacts to Tribal Cultural Resources (TCRs) through four consultation meetings and additional email exchanges. Wilton Rancheria, in its AB 52 consultation with SMUD for the proposed project, did not identify any known TCRs within or in the vicinity of the project area. Additionally, there are no known sites, features, sacred places, or objects located in the vicinity. However, Wilton Rancheria provided information it contends could influence the potential for unidentified cultural sites or artifacts to be present below the surface, particularly near the proposed substation site and offsite construction areas. In response, SMUD has incorporated measures to avoid and minimize potential impacts to unanticipated discoveries of TCRs, including spot check monitoring and a comprehensive program that includes training, monitoring, and coordinated response protocols.

In general, SMUD implements full-time monitoring in situations where there are known TCRs within or adjacent to the project site and when there are strong indicators that TCRs will be onsite. The information provided by Wilton Rancheria for this site is general and does not provide specific evidence of buried TCRs in the project area. SMUD does not consider identifying proximity to a travel route used by the Native American Peoples of the area as a general indication of high sensitivity to be sufficient justification for full-time monitoring in the absence of an identified TCR.

SMUD recognizes that ground-disturbing activities could potentially harm or destroy unanticipated discoveries of TCRs, if present. The current mitigation measures in the IS/MND are designed to sufficiently reduce this risk. Regardless of whether a Tribal Monitor is actively overseeing construction, if any person discovers suspected TCRs or resources of Tribal cultural significance during construction—including features, cultural soils, artifacts, shells, bones, shaped stones, or ash/charcoal deposits—work shall immediately cease within 100 feet of the discovery, or at an agreed-upon distance based on the project area and the nature of the find. In such a case, Wilton Rancheria shall be notified immediately and will determine whether the find constitutes a TCR. If confirmed as a TCR, any treatment or management of the resource shall be conducted in coordination with the appropriate Tribe. These measures minimize potential impacts to TCRs to a less-than-significant level.

In response to the requested revisions to the IS/MND on page 3.18-10, SMUD will revise the IS/MND to identify Wilton Rancheria as the appropriate Tribe for

monitoring and potential resource discoveries. See Section 3.0 for the revisions to the document.

Wilton provided examples of projects for which full-time tribal monitoring during ground-disturbing activities was proposed as mitigation where lead agencies were presented with similar, or even less, evidence regarding the likelihood of encountering buried resources. However, because both SMUD and Wilton were not parties to each of the referenced AB 52 consultations, the specific circumstances that lead to the inclusion of full-time tribal monitoring in those examples are not known. Accordingly, those examples do not establish that full-time monitoring is required or appropriate for this proposed project. A mitigation measure is intended to avoid, minimize, or compensate for environmental impacts caused by a proposed project. Mitigation Measure TCR-1 requires tribal monitors to be present at the project site for up to one half-day, two times per week, during ground-disturbing activities. The tribal monitor will complete daily construction logs and identify any inadvertent discoveries of TCRs with the potential to be adversely affected by the project. Mitigation Measure TCR-2 provides procedures to be followed in the event of inadvertent discovery of a TCR. With implementation of Mitigation Measures TCR-1 and TCR-2, potential impacts to TCRs would be reduced to less-than-significant levels because the measures would provide for monitoring and response procedures designed to avoid or minimize the potential for adverse effects to TCRs. Therefore, the impact to TCRs would be less than significant with mitigation.

- 5-3 The comment references impacts to biological resources, including species and habitat, and relates these to TCRs. However, biological resources were not discussed during consultation meetings with SMUD before the release of the Draft IS/MND and were not identified by Wilton Rancheria as TCRs. Under CEQA, a “tribal cultural resource” is defined as a site, feature, place, cultural landscape (as geographically defined), sacred place, or object with cultural value to a California Native American tribe that meets specific criteria (see PRC § 21074). SMUD acknowledges that biological resources are meaningful to the Tribe, but also understands that mitigation measures to address impacts to species themselves will have the indirect effect of maintaining cultural and other Tribal connections to those mitigated-for species.

Section 3.4 “Biological Resources” of the IS/MND contains mitigation measures to avoid, minimize, and reduce impacts to biological resources such as Swainson’s hawk, tricolored blackbird, and nesting birds. Complete avoidance of vernal pools is not feasible due to their location within the project footprint and constraints like required setbacks from Jackson Highway and Excelsior Road, as well as the floodplain of Elder Creek. However, impacts to vernal pools will be minimized, and all temporary, indirect, and direct impacts will be fully mitigated in accordance with the SMUD Habitat Conservation Plan. Additionally, as described

in Response to Comment 4-3, vernal pools within the substation site will be avoided and protected in place to the greatest extent possible.

- 5-4 The comment questions the validity of using the SMUD HCP to mitigate project impacts. SMUD will continue to adhere to the terms of its HCP when implementing the proposed project and other projects within its service area. While the proposed substation is larger than the footprint estimated per substation in the SMUD HCP, the scale of the substation and the area affected does not directly correspond to impacts on the HCP's Covered Species. Consistent with the SMUD HCP, SMUD calculates the potential take of each covered species based on the loss or disturbance of that species' modeled habitat, conservatively assuming that all disturbed modeled habitat is occupied. Within the substation footprint and the surrounding area of disturbance, the only modeled habitats present are those for vernal pool fairy shrimp and vernal pool tadpole shrimp. As shown in Table 3.4-2 of the IS/MND, permanent impacts to SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover total 1.993 acres, and SMUD will implement mitigation for the temporary, indirect, and permanent disturbance to the habitat of these two Covered Species in accordance with the HCP. Permanent impacts to 2.30 acres of open water and fringe land cover, which are not modeled habitat for covered species under the SMUD HCP, would be mitigated as appropriate through the Regional Water Quality Control Board authorization for impacts to Waters of the State (e.g., Waste Discharge Requirements under the Porter Cologne Water Quality Control Act) and an LSAA with CDFW as required, and as described in the Response to Comment 4-7. Consistent with the SMUD HCP five-year stay-ahead approach, SMUD will secure the mitigation necessary to fully offset the project's forecasted impacts to Covered Species modeled habitat. If at any time SMUD anticipates exceeding the estimated impact amount, SMUD will secure the additional mitigation necessary to ensure that mitigation occurs ahead of the impact. Because the project's Covered Species impacts are authorized and mitigated under the SMUD HCP incidental take permit and its other aquatic impacts would be addressed through regulatory permitting, the project does not conflict with the SMUD HCP and the IS/MND's conclusion that impacts to biological resources would be less than significant with mitigation is supported.
- 5-5 The comment asserts that the IS/MND impermissibly defers mitigation for TCRs and other resource areas. Mitigation measures for impacts to TCRs are provided in the IS/MND via Mitigation Measures TCR-1 and TCR-2. Both measures establish specific, enforceable performance standards, with inclusion of tribal involvement in all determinations of significance and decision-making regarding unanticipated finds. These standards include mandatory Tribal spot-check monitoring during ground-disturbing activities, an immediate work stoppage within 100 feet of any suspected discovery regardless of whether monitoring is occurring, evaluation of the find by a Tribal Representative, preservation in place as the preferred treatment, coordination with the Tribe on culturally appropriate

treatment, and documentation of discoveries on Department of Parks and Recreation 523 forms. SMUD's Inadvertent Discovery Plan is an implementation tool that operationalizes these established standards; it does not supply the performance standards themselves, which are clearly described in the IS/MND.

Similarly, the SWPPP is a required document under the National Pollutant Discharge Elimination System Construction General Permit and must achieve the water-quality performance standards established by that permit. SWPPPs are required to be prepared prior to construction and cannot be effectively prepared until final site designs are completed. The SWPPP performance standards are statutorily required, and SMUD is legally required to adhere to them. Therefore, no changes to the IS/MND are required.

- 5-6 The comment asserts that the IS/MND's cumulative impacts analysis is inadequate for both TCRs and biological resources. Cumulative impacts are discussed in Section 3.21, "Mandatory Findings" of the IS/MND. With respect to TCRs, no specific resources or sites were identified during AB 52 consultation that would be lost or irreversibly damaged upon implementation of the proposed project. Mitigation Measures TCR-1 and TCR-2 identify the steps SMUD will take to avoid and minimize impacts to unanticipated finds that may be encountered during construction. Furthermore, SMUD has made a commitment to commemorate the use of Jackson Road as a Native American travel route through the installation of a mural along the substation perimeter fence/wall. As stated in Section 3.21, other development projects in the area are subject to individual CEQA and/or NEPA review to disclose and mitigate impacts on TCRs, along with compliance with AB 52 and other federal and state regulations adopted to reduce environmental effects. When considering the existing regulatory framework applicable to cumulative development in the area, along with the mitigation measures identified in the IS/MND to address project-specific effects, the proposed project would not make a cumulatively considerable contribution to an identified significant impact.

With respect to biological resources, the project's Covered Species impacts are addressed within the SMUD HCP regional conservation framework and mitigated under that plan. The mitigation measures in the IS/MND, which are based in part on the SMUD HCP measures, are designed to consider species viability and habitat protection in the context of regional development in SMUD's service area. Cumulative impacts to biological resources are not anticipated with implementation of the mitigation measures identified in Section 3.4, "Biological Resources".

With implementation of the identified mitigation, cumulative impacts to TCRs and biological resources would be less than significant, and an EIR is not required.

- 5-7 SMUD thanks Wilton Rancheria for their comments and interest in the proposed project. Responses to Comments 5-1 through 5-6 address the issues summarized in this comment.

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3.0 CHANGES TO DRAFT IS/MND TEXT

This chapter contains changes to the text of the Draft IS/MND in response to certain comments. These changes are generally referenced in the responses to comments in Chapter 2 or are provided to be consistent with changes referenced in Chapter 2. The changes are presented in the order in which they appear in the Draft IS/MND and are identified by Draft IS/MND page number. Text deletions are shown in ~~strikeout~~ (~~strikeout~~) and additions are shown in underline (underline). The changes identified below do not alter the conclusions of the IS/MND with respect to any of the significant impacts of the project and do not necessitate recirculation of the Draft IS/MND.

3.1 Changes to Draft IS/MND Text

The text beginning on page 3.4-18 of the Draft IS/MND is revised as follows:

Mitigation Measure BIO-2: Compensate for Impacts to Wetlands and Aquatic Species Habitat. Mitigation for both temporary and permanent vernal pool tadpole shrimp and vernal pool fairy shrimp habitat disturbance will be provided as part of SMUD's HCP. Temporary impacts would be mitigated at a 0.5:1 ratio, ~~and~~ permanent impacts would be mitigated at a 3:1 ratio through a combination of preservation and restoration, and indirect impacts within 250 feet of the substation would be mitigated at a 1:1 ratio. SMUD will use vernal pool restoration or creation credits at a 1:1 ratio (i.e., 2:1 preservation, 1:1 restoration/creation). If required, additional compensation for impacts to aquatic resources (wetlands and other waters) would be determined during Clean Water Act Section 401 and 404 and CFGC Section 1600 permitting.

The text beginning on page 3.4-26 of the Draft IS/MND is revised as follows:

Mitigation Measure BIO-10: Conduct Pre-construction Survey for Migratory Birds and Raptors, Including Special-status Species. For any construction activities that will occur between February 1 and August 31 within the substation site and overhead line corridor work limits, a qualified biologist shall conduct a pre-construction survey in suitable nesting habitat within ~~400~~ 300 feet for passerine nests (including for tricolored blackbird and loggerhead shrike), within 500 feet for raptor nests and ground nests (including for northern harrier and burrowing owl), and within ~~0.25~~ 0.5 mile for Swainson's hawk and white-tailed kite nests. If construction activities occur during bird nesting season (between February 1 and August 31), including equipment staging and construction, surveys shall be conducted within 7 days prior to commencement of construction activities.

If no active nests are found during the pre-construction survey, no additional mitigation measures are required.

If an active bird or raptor nest is identified within the construction work area or an active raptor nest is identified within the appropriate survey buffers from the construction work area, a no-disturbance buffer shall be established around the nest to avoid disturbance of the nesting birds or raptors until a qualified biologist determines that the young have fledged and are foraging on their own or the nest has failed. The extent of these buffers shall be determined by the biologist and shall depend on the species identified, level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers. In addition to the establishment of buffers, other avoidance measures may include monitoring the nest during construction and restricting the type of work that can be conducted near the nest site. If a lapse in construction activities for one week or longer occurs during the avian breeding season, another pre-construction survey shall be performed prior to work re-initiation.

The text beginning on page 3.4-26 of the Draft IS/MND is revised as follows:

Mitigation Measure BIO-11: Conduct Preconstruction Survey for Burrowing Owl and Implement Avoidance Measures. ~~Preconstruction surveys for burrowing owls would be completed within the substation site and overhead line corridor work limits prior to the initiation of ground disturbance. This survey would be conducted in all areas of potential habitat within the substation site plus a 500-foot buffer as well as the overhead line corridor work limits consistent with the methods described in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) or an updated version of this document. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas.~~

~~If the biologist finds an active burrowing owl burrow, the biologist would establish a buffer around the site. The buffer location would be based on the CDFW Staff Report on Burrowing Owl Mitigation (2012) or at the distance which the biologist, in consultation with CDFW, determines that burrowing owls would not be harassed by the project. If an active burrow is identified and a no-disturbance buffer cannot be maintained, coordination with CDFW will be completed.~~

1. Burrowing Owl Surveys. SMUD shall conduct a BUOW survey over all suitable habitat present within the project site. BUOW surveys shall be conducted by a qualified biologist in accordance with the protocol described in the Staff Report on Burrowing Owl Mitigation (CDFW, March 7, 2012). If possible, surveys should be conducted during both the breeding (February 1 – August 31) and non-breeding seasons (September 1 – January 31) immediately preceding the planned start of construction activities to ascertain the seasonal residency status of any owls occupying the site. The presence of BUOW or their sign anywhere on the site or within a 500-foot accessible radius around the project site shall be recorded and mapped. Surveys shall

disclose all burrows and occurrence of sign of BUOW on the project site and within the 500-foot buffer.

2. Burrowing Owl Take Avoidance. During the breeding season (February 1 to August 31), surveys shall document whether BUOW are nesting in or within 500 feet of the Project area. During the non-breeding season (September 1 to January 31), surveys shall document whether BUOW are using habitat in or directly adjacent to any area to be disturbed. Survey results shall only be valid for the season (breeding or non-breeding) during which the survey was conducted. If a lapse in Project-related work of fifteen (15) calendar days or longer occurs, another focused survey and consultation with SMUD and CDFW shall be required before Project work can be reinitiated. If a BUOW or evidence of presence at or near a burrow entrance is found to occur within 500 feet of the Project site, the following measures shall be implemented:
 - a. If BUOW are found during the non-breeding season (approximately September 1 to January 31), SMUD shall establish a minimum 160-foot (50-meter) buffer zone around active burrows. The buffer zone shall be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a qualified biologist confirms that such measures do not cause agitated behavior.
 - b. If BUOW are found during the breeding season (approximately February 1 to August 31), SMUD shall:
 - i. Avoid all nest sites that could be disturbed by Project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging).
 - ii. Establish a minimum 500-foot non-disturbance buffer zone around nests, unless otherwise approved by SMUD in writing, in consultation with CDFW. The buffer zone shall be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer will be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. Construction shall only occur within the 500-foot buffer zone during the breeding season if a qualified biologist monitors the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have

fledged and moved off site. Any modifications to this buffer shall be approved by SMUD, in consultation with CDFW prior to its implementation. The buffer reduction request shall include relevant information and/or propose new measures to justify the buffer reduction. The buffer area must be clearly marked to prevent Project-related activities from occurring within the buffer zone.

3. Eviction of Burrowing Owls. If after all applicable avoidance and minimization measures are implemented and SMUD needs to evict BUOW, an ITP shall be obtained for the activity and a BUOW eviction plan shall be developed by a qualified biologist for SMUD's review and approval, in consultation with CDFW. This plan, including its proposed mitigation, shall be consistent with the most recent available guidelines (e.g., 2012 Staff Report on Burrowing Owl Mitigation). Burrow eviction shall only be conducted during the non-breeding season for burrows located in the Project footprint, and in limited instances within a buffer zone around the Project site, as determined by SMUD in consultation with CDFW after all avoidance and minimization measures have been exhausted.

Mitigation Measure BIO-12 Raptor Nest Relocation or Removal and Mitigation for Loss of Swainson's Hawk Foraging Habitat.

1. Prior to the relocation (preferred) or removal of raptor nests within the project site, the SMUD Avian Protection Program (APP) Coordinator will be contacted. The APP coordinator will document the status of the nest to determine when it is unoccupied and coordinate with CDFW regarding the plan for relocation or removal. Removal or relocation will occur during the non-nesting season and when the nest is unoccupied. Once the nest is removed or relocated, the nesting tree will be removed.
2. To offset net impacts on foraging habitat for breeding Swainson's hawks SMUD shall mitigate the loss of Swainson's hawk foraging habitat in accordance with CDFW recommendations (CDFG 1994) by providing mitigation lands or securing Swainson's hawk mitigation bank credits. Mitigation shall be provided for impacts to suitable foraging habitat occurring within 10 miles of an active Swainson's hawk nest, as determined by a qualified biologist and in consultation with CDFW. All mitigation lands protected under this mitigation measure shall be protected in a form acceptable to CDFW (e.g., through fee title acquisition or conservation easement) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk.

The text beginning on page 3.13-11 of the Draft IS/MND is revised as follows:

Sacramento County has not adopted its own construction-specific noise standards. Thus, the FTA construction noise standards are used to assess construction noise impacts. FTA has a daytime construction noise standard of 90 dB L_{eq} for residential uses and 100 dB L_{eq} for commercial/industrial uses (FTA 2018). Estimated project-related construction noise levels at the nearest noise-sensitive receptors (residences located along Jackson Road and Excelsior Road) are expected to range from approximately 73 to 80 dBA L_{eq}. Construction noise would not exceed FTA's daytime construction noise standards at these receptors. Therefore, construction noise impacts would be less than significant. This would represent an increase of approximately 14 dB above existing daytime ambient levels. Because the Sacramento County significance threshold identifies a potentially significant impact when construction noise exceeds ambient levels by 5 dB or more, temporary increases in noise could result in a **potentially significant impact** at the nearest receptors. SMUD would implement Mitigation Measure NOI-1 to reduce construction noise to the extent feasible.

Mitigation Measure NOI-1: Construction Noise Reduction

~~The contractor shall implement the following measures during project construction:~~

- ~~• Whenever construction activities for the proposed substation involve sustained heavy equipment operation within 200 feet⁴ of occupied residences (on or offsite), temporary barriers shall be constructed around the active construction area to shield the ground floor of the noise sensitive uses. These barriers shall be of ¾-inch Medium Density Overlay (MDO) plywood sheeting, or other material of equivalent utility and appearance, and shall achieve a Sound Transmission Class of STC 30 or greater, based on certified sound transmission loss data taken according to American Society for Testing and Materials International (ASTM) Test Method E90.~~
- ~~• When short duration and mobile construction activities associated with installation of overhead subtransmission and distribution line poles (e.g., augering, pole setting, and conductor stringing) occur within 200 feet of occupied residences, the contractor shall implement localized noise control measures to the extent feasible, such as positioning equipment to maximize distance from residences, using temporary localized shielding or equipment orientation, and limiting the duration of high-noise activities at any one location.~~
- ~~• Construction activities shall comply with the Sacramento County Noise Ordinance (Sacramento County Code, Chapter 6.68), which limits such activities to the hours of 6:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on Saturdays and Sundays. Nighttime construction between 10:00 p.m. and 7:00 a.m. is prohibited. All construction equipment shall be properly~~

~~maintained and equipped with intake and exhaust mufflers or silencers in good working order to minimize noise emissions.~~

- ~~• Construction equipment staging areas shall be located as far as feasible from residential areas while still serving the needs of construction contractors.~~

~~Implementation of Mitigation Measure NOI-1 would reduce the impact of daytime construction-related noise at the nearest sensitive uses to **less than significant with mitigation.**~~

The text beginning on page 3.18-10 of the Draft IS/MND is revised as follows:

Mitigation Measure TCR-1: Spot Check Monitoring During Ground-disturbing Activities

~~Tribal cultural resources are presumed near the project area. There is a potential for unidentified cultural sites, artifacts or unanticipated TCRs to be present below the surface. Therefore, a Tribal monitor from Wilton Rancheria a California Native American Tribe that is traditionally and culturally affiliated with the geographic area will perform spot check monitoring, up to half-day monitoring, two (2) times per week, during ground-disturbing activities including trenching, excavating, and grading. The Tribal representative will be given 48 hours' notice before ground disturbance starts. The Tribal monitor will complete daily logs. Logs will confirm any finds, the locations of the find, time and date in accordance with SMUD's Inadvertent Discovery Plan. If Tribal cultural resources are identified that have the potential to be adversely affected by the project, SMUD will implement *Mitigation Measure TCR-2 Unanticipated Discoveries of Tribal Cultural Resources.*~~

Mitigation Measure TCR-2: Unanticipated Discoveries of Tribal Cultural Resources

Although surface level TCRs, including human remains, have not been identified for this project, Tribal consultation has shown that there is the potential for unidentified sites of cultural significance to be present in the subsurface context, near the Jackson Bulk Substation and associated offsite construction locations.

If any suspected TCRs or resources of Tribal cultural significance, including but not limited to features, anthropogenic/cultural soils, cultural belongings or objects (artifacts), shell, bone, shaped stones or bone, or ash/charcoal deposits are discovered by any person during construction activities including ground disturbing activities, all work shall pause immediately within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. Work shall cease in and within the immediate vicinity of the find regardless of whether the construction is being actively monitored by a Tribal Monitor, cultural resources specialist, or professional archaeologist. A Tribal Representative from

~~Wilton Rancheria a California Native American Tribe that is traditionally and culturally affiliated with a geographic area~~ shall be immediately notified and shall determine if the find is a TCR (PRC §21074). Evaluation and treatment will be performed in coordination with Tribes in accordance with SMUD's Inadvertent Discovery Plan.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. If redesign is determined to not be feasible, SMUD shall consult with Tribes to determine appropriate treatment of the find.

Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by ~~Wilton Rancheria the California Native American Tribe that is traditionally and culturally affiliated with the project area.~~

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate Tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects and belongings, and reburial of cultural objects and belongings or cultural soil. The construction contractor(s) shall provide secure, on-site storage for culturally sensitive soils or objects that are components of TCRs that are found or recovered during construction. Only Tribal Representatives shall have access to the storage. Storage size shall be determined by the nature of the TCR and can range from a small lock box or jobsite work box to a conex box (shipping container). A secure (locked), fenced area can also provide adequate on-site storage if larger amounts of material must be stored.

The construction contractor(s) and SMUD shall facilitate the respectful reburial of the culturally sensitive soils or objects. This includes providing a reburial location that is consistent with the Tribe's preferences, excavation of the reburial location, and assisting with the reburial, upon request.

Any discoveries shall be documented on a Department of Parks and Recreation (DPR) 523 form within 2 weeks of the discovery and submitted to the appropriate CHRIS center in a timely manner.

Work at the TCR discovery location shall not resume until authorization is granted by the Lead Agency in coordination with the culturally affiliated Tribe.

If articulated or disarticulated human remains, or human remains in any state of decomposition or skeletal completeness are discovered during construction activities, the Sacramento County Coroner shall be contacted immediately. Upon determination by the Sacramento County Coroner that the find is Native American in origin, the Native American Heritage Commission will assign the Most Likely Descendent who will work with SMUD to define appropriate treatment and disposition of the burials.

For any work required to be undertaken in an area where shoring ~~and~~ or ~~with~~ hazardous materials would occur, including soils, all archaeologists, Tribal Representatives, and Tribal Monitors shall meet the appropriate level of safety training (e.g., confined spaces, hazardous material exposure, etc.) in compliance with California Division of Occupational Safety and Health State and federal Occupational Safety and Health Administration requirements prior to entering construction work areas.

The text beginning on page 3.21-3 of the Draft IS/MND is revised as follows:

The proposed project would result in a temporary increase in ambient noise levels ~~potentially significant noise impact~~ during construction; however, construction would occur within the allowable hours under the County's Noise Ordinance and noise levels would not exceed applicable construction noise criteria establish by FTA ~~this impact would be addressed by implementing appropriate mitigation measures~~, as outlined in Section 3.13, "Noise". ~~Implementation of these mitigation measures would reduce~~ Therefore, noise impacts would be to less than significant. No other direct or indirect impacts on human beings were identified in this IS/MND.

The text beginning on page 4-9 of the Draft IS/MND is revised as follows:

- **Noise:** The project would generate temporary and short-term construction noise from equipment operating on the substation site, from construction of overhead lines, and from the transport of construction equipment, materials, and workers to and from the site. Construction activities would comply with the Sacramento County Noise Ordinance (Sacramento County Code, Chapter 6.68) ~~and implement Mitigation Measure NOI-4 to reduce~~ and the impact of construction noise at the nearest sensitive uses ~~to would be~~ would be less than significant. Operational noise impacts from the new substation would be less than significant.

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 Introduction

This mitigation monitoring and reporting program (MMRP) summarizes the mitigation measures, implementation schedule, and responsible parties for monitoring the mitigation measures required of the proposed project, as set forth in the IS/MND prepared for the project.

Section 21081.6 of the California Public Resources Code and Section 15091(d) and Section 15097 of the State CEQA Guidelines require public agencies “to adopt a reporting or monitoring program for changes to the project which it has adopted or made conditions of project approval to mitigate or avoid significant effects on the environment.” An MMRP is required because the IS/MND for the project identified potentially significant adverse impacts related to construction and operation of the project, and mitigation measures have been identified to reduce these impacts to a less-than-significant-level.

This MMRP will be adopted by SMUD if it approves the project and will be kept on file at SMUD’s Customer Service Center at 6301 S Street, Sacramento, CA 95817. SMUD will use this MMRP to ensure that identified mitigation measures, adopted as a condition of project approval, are implemented appropriately.

4.2 Mitigation Implementation and Monitoring

SMUD will be responsible for monitoring the implementation of mitigation measures designed to minimize impacts associated with the project. While SMUD has ultimate responsibility for ensuring implementation, others may be assigned the responsibility of actually implementing the mitigation. SMUD will retain the primary responsibility for ensuring that the project meets the requirements of this MMRP and other permit conditions imposed by participating regulatory agencies.

SMUD will designate specific personnel who will be responsible for monitoring implementation of the mitigation that will occur during project construction. The designated personnel will be responsible for submitting documentation and reports to SMUD on a schedule consistent with the mitigation measure and in a manner necessary for demonstrating compliance with mitigation requirements. SMUD will ensure that the designated personnel have authority to require implementation of mitigation requirements and will be capable of terminating project construction activities found to be inconsistent with mitigation objectives or project approval conditions.

SMUD and its appointed contractor will also be responsible for ensuring that its construction personnel understand their responsibilities for adhering to the performance requirements of the mitigation plan and other contractual requirements related to the implementation of mitigation as part of project construction. In addition to the prescribed

mitigation measures, Table 4-1 lists each identified environmental resource being affected (in the same order and using the same numbering system as in the IS/MND), the associated CEQA checklist question (used as the thresholds of significance in the IS/MND), the corresponding monitoring and reporting requirement, the party responsible for ensuring implementation of the mitigation measure and monitoring effort, and the project component to which the mitigation measure applies. If an issue addressed in the IS/MND does not result in mitigation, it is not included in the table.

4.3 Mitigation Enforcement

SMUD will be responsible for enforcing mitigation measures. If alternative measures are identified that would be equally effective in mitigating the identified impacts, implementation of these alternative measures will not occur until agreed upon by SMUD.

SMUD shall, or may require the contractor to, prepare a monitoring report upon completion of the project describing the compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented consistent with the MMRP requirements. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required. The report shall be presented to SMUD's Board of Directors.

Table 4-1. Summary of Impacts and Mitigation Measures

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
Air Quality	Conflicts with or obstruction of an applicable air quality plan related to construction PM emissions.	Mitigation Measure AQ-1a. Implement SMAQMD Basic Construction Emission Control Practices for Substation Construction Activities The construction contractor shall include as a condition in the grading, improvement, and demolition plans, the following basic construction emissions control practices (best management practices) to be initiated at the start and maintained throughout the duration of construction activities associated with the proposed substation. • Water all exposed active work areas two times daily, or with adequate frequency for continued moist soil. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. However, do not overwater to the extent that sediment flows off the site. • Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered. • Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. • Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). • Suspend excavation, grading, and/or demolition activity when average wind speeds exceed 20 mph.	Before and during substation construction	During substation construction	SMUD	SMUD	Substation construction activities

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. - Install wheel washers, rattle plates and/or rock aprons for all exiting trucks or equipment leaving the site. - Treat site accesses from the paved road with a 6 to 12-inch layer of gravel to reduce generation of road dust and road dust carryout onto public roads. - Post a publicly visible sign with the telephone number and person to contact at the County of Sacramento regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of SMAQMD shall also be visible to ensure compliance. - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. - Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html. Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
Air Quality	Conflict with or obstruction of an applicable air quality plan related to operational PM emissions.	Mitigation Measure AQ-1b. Implement SMAQMD PM Operational Best Management Practices SMUD shall follow best management practice requirements for fugitive dust control during operational and maintenance activities associated with the project: - Limit vehicle speeds on unpaved roads to 15 mph. - Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. - Compliance with anti-idling regulations for diesel powered commercial motor vehicles (greater than 10,000 gross vehicular weight rating). The current requirements include limiting idling time to 5 minutes and installing technologies on the vehicles that support anti-idling.	During operation and maintenance activities	During operation and maintenance activities	SMUD	SMUD	All project operational activities
Biological Resources	Potential impacts to special-status species, vernal pool branchiopods, nesting birds, bats, and special-status plants.	G-AMM2. Minimize Impacts of Work Area. To the extent possible, SMUD field crews and contractors will reduce the work area footprint and the duration of work at a work area to reduce the potential for take of Covered Species. G-AMM3. Work Area Access. SMUD field crews and contractors will use existing paved and unpaved roads to access the work area where available. Vehicles and equipment will be parked on pavement, existing roads, or previously disturbed areas to the maximum extent feasible. When this is not feasible, SMUD will implement G-AMM4: Off Road Speed Limit, VP-AMM1: Avoid Driving through Vernal Pools, and VP-AMM2: Minimize Vehicle Impacts on Vernal Pools.	Before and during construction	During construction	SMUD / Contractor	SMUD	All construction phases within substation site and overhead line corridor

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		G-AMM4. Off Road Speed Limit. When driving off of paved roads in Covered Species habitat, vehicles will not exceed a speed limit of 15 miles per hour. G-AMM5. Work Area General Guidelines. Trash dumping, littering, open fires (such as barbecues), hunting, and pets will be prohibited in Covered Activity work areas. All garbage will be removed from the project site at the end of each workday. G-AMM6. Erosion Control Measures. SMUD field crews will utilize standard erosion and sediment control best management practices (BMPs) (pursuant to the most current version of the California Stormwater Best Management Practices Handbook) to prevent construction site runoff into SMUD HCP Riverine; Open Water/Fringe; Other Depressional Wetland; and Vernal Pool, Seasonal Wetland, and Swale land cover types when Covered Activities are the source of potential erosion. Soil will be stockpiled within established work area boundaries, and stockpiles will be located so as not to enter water bodies, stormwater inlets, or other standing bodies of water. Stockpiled soil will be covered prior to precipitation events. Erosion control materials will be removed once the site has been stabilized.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		G-AMM7. Equipment Refueling. SMUD field crews will not refuel or conduct equipment maintenance activities within 250 feet of SMUD HCP Vernal Pool, Seasonal Wetland, and Swale, and within 100 feet of any Riverine, Open Water/Fringe, or Other Depressional Wetlands land cover types. If refueling must be conducted closer to wetlands, SMUD field crews will construct a secondary containment area subject to review by an environmental specialist and/or biologist. SMUD field crews will maintain spill prevention and cleanup equipment in refueling areas. G-AMM8. Hazardous Materials Clean Up. SMUD field crews will clean up any spilled oil, fuel, or other automotive fluids. SMUD field crews will ensure that all construction areas have proper spill clean-up materials (absorbent pads, sealed containers, booms, etc.) to contain the movement of any spilled substances. G-AMM11. Stabilization of Disturbed Areas. SMUD field crews will remove any temporary fill or construction debris and will backfill all excavation sites with native soil, and with crushed gravel around the bases of poles for compaction, following completion of Covered Activities. Disturbed areas will be stabilized by compacting soils and returning to pre-project contours so that the areas are commensurate with the topography of the surrounding soil, or qualified stormwater personnel will prescribe BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction. SMUD field crews will not move weed-infested gravel, rock, and other fill materials to undisturbed areas that are relatively free of weeds, but will focus fill in areas that have previously been disturbed.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		G-AMM12. Excess Soil. When excess soil is spread out following an excavation activity, SMUD will not place soil in SMUD HCP Riverine; Open Water/Fringe; Other Depressional Wetlands; or Vernal Pool, Seasonal Wetland, and Swale land cover types or in Covered Species Modeled Habitat that contains burrows. G-AMM13. Soil Management. SMUD field crews will stockpile soil within established work area boundaries and position stockpiles so as not to enter SMUD HCP Riverine; Open Water/Fringe; Other Depressional Wetlands; or Vernal Pool, Seasonal Wetland, and Swale land cover types or in Modeled Habitat with burrows. SMUD field crews will cover stockpiled soil with visquen or tarps prior to precipitation events. G-AMM14. Revegetation of Work Areas. If a Covered Activity temporarily disturbs 0.1 acre or more of Modeled Habitat for a Covered Species that contains herbaceous vegetation, SMUD field crews will revegetate the area with a native weed free seed mix within 6 months of disturbance. G-AMM15. Temporary Vehicle Access to Work Areas. SMUD field crews will minimize clearing vegetation and grading for temporary vehicle access to the maximum extent feasible. Any temporary road will be returned to pre-project contours and the soil compacted for stabilization, or qualified stormwater personnel will prescribe BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		G-AMM17. Night Lighting. For Covered Activities that occur at night, SMUD field crews will position any temporary lights needed away from any Covered Species habitat. For lighting at permanent facilities, such as substations, all lighting will be oriented downward towards major equipment to minimize glare onto surrounding property. G-AMM18. Unanticipated Covered or ESA and CESA-Listed Species. SMUD field crews will stop work and contact SMUD Environmental Services if a species listed under the FESA and CESA or a Covered Species is found within the work area or within 100 feet of a work area. SMUD Environmental Services will have authority to stop activities, and will do so, until appropriate corrective measures have been completed or it is determined that the individual FESA and CESA-listed or Covered Species will not be taken (including harmed). If the FESA and CESA-listed or Covered Species is in immediate danger, only a qualified biologist can capture and relocate the Covered Species. The Service must be contacted if the species is FESA and CESA-listed, but is not a Covered Species. VP-AMM1. Avoid Driving through Vernal Pools. SMUD field crews will avoid driving through SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover to the maximum extent feasible. When this is not feasible, SMUD will implement VP-AMM2: Minimize Vehicle Impacts on Vernal Pools.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		VP-AMM2. Minimize Vehicle Impacts on Vernal Pools. If a Covered Activity work area or access to the work area is located on SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover, SMUD field crews will evaluate site conditions and determine if soil moisture is present. If soil moisture is present, the field crew will coordinate with the Environmental Services team to identify alternative measures to minimize disturbance of Covered Species Modeled Habitat. Alternative measures may include laying down rubber matting, creating temporary bridges over swales, or using alternate access routes as prescribed by SMUD Environmental Services to minimize impacts. If it is not feasible for SMUD to avoid driving through Vernal Pool, Seasonal Wetland, and Swale land cover while moisture is present, SMUD will track the acres of disturbance, and those acres will count toward take limits. VP-AMM3. Vernal Pool Covered Species Soil Stockpile. For Covered Activities in SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover, SMUD field crews will stockpile the upper 4 inches of topsoil from within the ordinary high-water mark of any aquatic features separately during excavations. This topsoil will be replaced within the aquatic feature and manipulated so as to restore the original contours within the aquatic feature. Soil compaction will be minimized to the extent consistent with utility standards. Erosion control measures such as straw wattles, coconut fiber rolls/blankets, silt fencing, and as determined by the qualified biologist, will be implemented where necessary to protect topsoil stockpiles and keep the seed bank and/or cysts in the stockpiled soil viable.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		VP-AMM4. Avoid Occupied Orcutt Grass Habitat. SMUD Environmental Services will review design plans to ensure that no new poles or other facilities are placed in vernal pools that are known (as noted in an up to date [current at time of project implementation] California Natural Diversity Database query) to support slender Orcutt grass or Sacramento Orcutt grass. VP-AMM6. Covered Vernal Pool Invertebrate Work Window. When Vernal Pool Invertebrate Covered Species Modeled Habitat is present within 250 feet of Covered Activities, Environmental Services will schedule the Covered Activity to occur in the dry season (approximately April 15 through October 15) and prior to the first significant rain (0.25 inch in 24 hours) to the maximum extent feasible. If the Covered Activity cannot be performed in the dry season, the field crew will implement additional measures as prescribed by SMUD Environmental Services to avoid or minimize impacts. Additional measures could include, but are not limited to, directing crews on access, use of erosion/sediment fencing, use of access mats or other techniques to avoid direct or indirect effects, requiring foot access, or requiring a biological monitor during the activity. If additional measures do not result in total avoidance, SMUD will mitigate at a 0.5:1 ratio for temporary and/or 3:1 for permanent direct habitat disturbance or loss.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		VP-AMM7. Vernal Pool Biological Monitor. If Covered Activities will directly impact SMUD HCP Vernal Pool, Seasonal Wetland, and Swale land cover (modeled habitat), a qualified biologist will be present onsite and monitor the Covered Activity to ensure that all applicable AMMs are implemented correctly and that no unnecessary ground disturbance or take of species occurs. The qualified biologist will have the authority to stop all activities that could result in such take or destruction, and will do so, until appropriate corrective measures have been completed. SMUD will report any unauthorized take to USFWS and/or CDFW within 24 hours. Mitigation Measure BIO-1: Environmental Awareness Training for Construction Personnel. All construction personnel will be given environmental awareness training before the start of construction. As part of the training, an environmental awareness handout will be provided to all personnel that describes and illustrates sensitive resources (i.e., waters of the U.S. and state, special-status species and habitat, nesting birds/raptors) to be avoided during construction and lists applicable permit conditions identified by state and federal agencies to protect these resources.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Mitigation Measure BIO-2: Compensate for Impacts to Wetlands and Aquatic Species Habitat. Mitigation for both temporary and permanent vernal pool tadpole shrimp and vernal pool fairy shrimp habitat disturbance will be provided as part of SMUD's HCP. Temporary impacts would be mitigated at a 0.5:1 ratio, permanent impacts would be mitigated at a 3:1 ratio through a combination of preservation and restoration, and indirect impacts within 250 feet of the substation would be mitigated at a 1:1 ratio. SMUD will use vernal pool restoration or creation credits at a 1:1 ratio (i.e., 2:1 preservation, 1:1 restoration/creation). If required, additional compensation for impacts to aquatic resources (wetlands and other waters) would be determined during Clean Water Act Section 401 and 404 and CFGC Section 1600 permitting. Mitigation Measure BIO-3: Conduct a Pre-construction Survey for Monarch Butterfly. A biologist would conduct a pre-construction clearance survey for milkweed within 48 hours prior to the initiation of ground disturbance within the project work limits at the substation site and overhead line corridor pole locations. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas. This survey would consist of walking transects while conducting visual encounter surveys within areas that would be subject to clearing, staging, or other ground disturbing activities. If milkweed is identified within the construction work area, the biologist would determine an appropriate no-disturbance buffer to ensure avoidance of the milkweed. Fencing or flagging would be used to maintain the buffer around milkweed areas during project activities.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		If botanical surveys completed for overhead lines/pole work rule out presence of milkweed, a pre-construction survey is not required. If milkweed plants are observed within the project work limits and no eggs or larvae are observed on the plant(s), the plant(s) should be removed in a manner that allows them to be re-planted outside of the project work limits and fencing should be installed around the placement area to ensure avoidance during construction activities. If the monarch butterfly larvae or eggs are observed on milkweed plants or other vegetation, then the biologist will establish a fenced 5-foot no disturbance buffer around the plant(s). This buffer will remain in place until the egg or larvae have metamorphosed. Once the metamorphosis has occurred, the plant(s) may be removed and replanted. Mitigation Measure BIO-4: Implement Crotch's Bumblebee Avoidance Measures. A qualified biologist will conduct at least 3 focused foraging and nesting surveys within suitable habitat, between April and August the year prior to the initiation of ground disturbance, within the project work limits at the substation site and overhead line corridor pole locations. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas. Surveys will follow CDFW's "Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species" dated					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		June 6, 2023 (CDFW 2023) or the most recent guidance. If Crotch's bumblebee is observed, the qualified biologist may propose site-specific measures to avoid take or SMUD would consult with CDFW to obtain an Incidental Take Permit if take of Crotch's bumblebee may occur during project activities. Mitigation Measure BIO-5: Environmentally Sensitive Area Exclusion Fencing. Prior to the start of construction at the substation site, environmentally sensitive area (ESA) exclusion fencing will be installed along the wetland avoidance area boundary. The fencing material shall consist of silt fence or equivalent barrier and will be of a height and material suitable for wildlife exclusion. The fencing shall be checked regularly and maintained until all construction is complete. Mitigation Measure BIO-6: Biological Monitor. A biological monitor shall be present within the substation site during initial ground disturbance (including wildlife exclusion fencing installation and vegetation clearing), dewatering activities in stockponds, and during all pole work along the overhead line corridor within 10 feet of suitable water features.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Mitigation Measure BIO-7: Special-status Species Encounter. Consistent with G-AMM-18, if a special-status wildlife species, including species of special concern, is found within the construction area during project activities, work will immediately stop within a 50-foot radius of the individual. The individual will be allowed to leave the project work limits on their own and construction may resume once it is determined that the individual has moved away safely from the construction zone. If the individual is unable to leave the project work limits on their own, the individual may be moved, unless it is state or federally listed. If it is a state or federally listed wildlife species or SMUD HCP Covered species, procedures described in G-AMM-18 will be implemented. Mitigation Measure BIO-8: Conduct Pre-construction Survey for Western Spadefoot. A qualified biologist will conduct a pre-construction clearance survey for western spadefoot within the substation site and overhead line corridor work limits within 48 hours prior to the initiation of ground disturbance. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas. The pre-construction clearance survey will be limited to suitable water features, surrounding hydrologic or geographic features that support inundation during rain events, and associated upland habitat (e.g., grasslands and burrows). Crevices and burrows will be searched and avoided to the maximum extent practicable. If western spadefoot are present within the project work limits (including egg masses or tadpoles), then CDFW will be notified and additional avoidance and minimization measures will be implemented.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Mitigation Measure BIO-9: Conduct Pre-construction Survey for Northwestern Pond Turtle. A qualified biologist will conduct a pre-construction clearance survey for northwestern pond turtle within 48 hours prior to the initiation of ground disturbance within the project work limits at the substation site and overhead line corridor pole locations. If there is a lapse in ground disturbing activities for more than 6 months, an additional clearance survey would be completed in undisturbed areas. Pre-construction clearance surveys will be limited to suitable water features, surrounding hydrologic or geographic features that support inundation during rain events, and associated upland habitat (grasslands and other areas with seasonally friable soils that support burrows). If an adult northwestern pond turtle is located within upland habitat in the construction work area, the turtle will be allowed to voluntarily move outside of the work area on its own volition. If the species does not move on its own and is in the immediate vicinity of construction activities, a qualified biologist will relocate the turtle. If an active pond turtle nest containing either pond turtle hatchlings or eggs is found, appropriate avoidance measures would be implemented, which may include a “no-disturbance” buffer around the nest site until the hatchlings have moved to a nearby aquatic site.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Mitigation Measure BIO-10: Conduct Pre-construction Survey for Migratory Birds and Raptors, Including Special-status Species. For any construction activities that will occur between February 1 and August 31 within the substation site and overhead line corridor work limits, a qualified biologist shall conduct a pre-construction survey in suitable nesting habitat within 300 feet for passerine nests (including for tricolored blackbird and loggerhead shrike), within 500 feet for raptor nests and ground nests (including for northern harrier and burrowing owl), and within 0.5 mile for Swainson's hawk and white-tailed kite nests. If construction activities occur during bird nesting season (between February 1 and August 31), including equipment staging and construction, surveys shall be conducted within 7 days prior to commencement of construction activities. If no active nests are found during the pre-construction survey, no additional mitigation measures are required. If an active bird or raptor nest is identified within the construction work area or an active raptor nest is identified within the appropriate survey buffers from the construction work area, a no-disturbance buffer shall be established around the nest to avoid disturbance of the nesting birds or raptors until a qualified biologist determines that the young have fledged and are foraging on their own or the nest has failed.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		The extent of these buffers shall be determined by the biologist and shall depend on the species identified, level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers. In addition to the establishment of buffers, other avoidance measures may include monitoring the nest during construction and restricting the type of work that can be conducted near the nest site. If a lapse in construction activities for one week or longer occurs during the avian breeding season, another pre-construction survey shall be performed prior to work re-initiation. Mitigation Measure BIO-11: Conduct Preconstruction Survey for Burrowing Owl and Implement Avoidance Measures. 1. Burrowing Owl Surveys. SMUD shall conduct a BUOW survey over all suitable habitat present within the project site. BUOW surveys shall be conducted by a qualified biologist in accordance with the protocol described in the Staff Report on Burrowing Owl Mitigation (CDFW, March 7, 2012). If possible, surveys should be conducted during both the breeding (February 1 – August 31) and non-breeding seasons (September 1 – January 31) immediately preceding the planned start of construction activities to ascertain the seasonal residency status of any owls occupying the site. The presence of BUOW or their sign anywhere on the site or within a 500-foot accessible radius around the project site shall be recorded and mapped. Surveys shall disclose all burrows and occurrence of sign of BUOW on the project site and within the 500-foot buffer.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		2. Burrowing Owl Take Avoidance. During the breeding season (February 1 to August 31), surveys shall document whether BUOW are nesting in or within 500 feet of the Project area. During the non-breeding season (September 1 to January 31), surveys shall document whether BUOW are using habitat in or directly adjacent to any area to be disturbed. Survey results shall only be valid for the season (breeding or non-breeding) during which the survey was conducted. If a lapse in Project-related work of fifteen (15) calendar days or longer occurs, another focused survey and consultation with SMUD and CDFW shall be required before Project work can be reinitiated. If a BUOW or evidence of presence at or near a burrow entrance is found to occur within 500 feet of the Project site, the following measures shall be implemented: a. If BUOW are found during the non-breeding season (approximately September 1 to January 31), SMUD shall establish a minimum 160-foot (50-meter) buffer zone around active burrows. The buffer zone shall be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a qualified biologist confirms that such measures do not cause agitated behavior. b. If BUOW are found during the breeding season (approximately February 1 to August 31), SMUD shall:					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		i. Avoid all nest sites that could be disturbed by Project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). ii. Establish a minimum 500-foot non-disturbance buffer zone around nests, unless otherwise approved by SMUD in writing, in consultation with CDFW. The buffer zone shall be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer will be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. Construction shall only occur within the 500-foot buffer zone during the breeding season if a qualified biologist monitors the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged and moved off site. Any modifications to this buffer shall be approved by SMUD, in consultation with CDFW prior to its implementation. The buffer reduction request shall include relevant information and/or propose new measures to justify the buffer reduction. The buffer area must be clearly marked to prevent Project-related activities from occurring within the buffer zone.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		3. Eviction of Burrowing Owls. If after all applicable avoidance and minimization measures are implemented and SMUD needs to evict BUOW, an ITP shall be obtained for the activity and a BUOW eviction plan shall be developed by a qualified biologist for SMUD's review and approval, in consultation with CDFW. This plan, including its proposed mitigation, shall be consistent with the most recent available guidelines (e.g., 2012 Staff Report on Burrowing Owl Mitigation). Burrow eviction shall only be conducted during the non-breeding season for burrows located in the Project footprint, and in limited instances within a buffer zone around the Project site, as determined by SMUD in consultation with CDFW after all avoidance and minimization measures have been exhausted. Mitigation Measure BIO-12: Raptor Nest Relocation or Removal and Mitigation for Loss of Swainson's Hawk Foraging Habitat. 1. Prior to the relocation (preferred) or removal of raptor nests within the Project site, the SMUD Avian Protection Program (APP) Coordinator will be contacted. The APP Coordinator will document the status of the nest to determine when it is unoccupied and coordinate with CDFW regarding the plan for relocation or removal. Removal or relocation will occur during the non-nesting season and when the nest is unoccupied. Once the nest is removed or relocated, the nesting tree will be removed.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		2. To offset net impacts on foraging habitat for breeding Swainson's hawks SMUD shall mitigate the loss of Swainson's hawk foraging habitat in accordance with CDFW recommendations (CDFG 1994) by providing mitigation lands or securing Swainson's hawk mitigation bank credits. Mitigation shall be provided for impacts to suitable foraging habitat occurring within 10 miles of an active Swainson's hawk nest, as determined by a qualified biologist and in consultation with CDFW. All mitigation lands protected under this mitigation measure shall be protected in a form acceptable to CDFW (e.g., through fee title acquisition or conservation easement) on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk. Mitigation Measure BIO-13: Conduct a Pre-construction Roosting Bat Survey Prior to Tree Removal or Trimming. A qualified biologist shall conduct a pre-construction survey of all trees proposed for removal or trimming within the substation site for the presence of bat roosts. Surveys will be conducted between February 16 to September 30. Surveys will entail direct inspection of trees, including around the base within piles of leaf litter, or nocturnal surveys. The survey shall occur no more than 2 weeks prior to the removal or trimming of trees within the substation site. If roosting habitat is present and occupied, then a qualified biologist shall determine the type of roost. If roosting bats are found within the substation site outside of the inactive season					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		(November 1 to February 15) and the maternity season (April 1 to September 30), the bats may be excluded from the roost using methods developed by a qualified biologist experienced in developing and implementing bat mitigation and exclusion plans in coordination with CDFW. If bats are found to be roosting within the substation site during the inactive season or the maternity season, the roost must be avoided or relocated in consultation with CDFW. Removal of bat roost trees would be conducted in two phases: the tree will be limbed on day 1 and the tree will be removed on day 2. Mitigation Measure BIO-14: Conduct a Pre-construction American Badger Survey Prior to Ground Disturbance. A qualified biologist shall conduct a pre-construction survey of suitable habitat at the substation site and overhead line corridor work limits within 7 days prior to the initiation of construction. The goal of the survey is to search for potentially active badger dens. If potential dens for American badger are detected during the pre-construction survey, the biologist will determine if the den is active. If the den is deemed inactive or unoccupied, no additional measures are needed. If an American badger is denning on or within 50 feet of the project work limits, SMUD shall avoid the den by a minimum 50-foot buffer. If an active den cannot be avoided, an avoidance or eviction plan must be developed and implemented in coordination with CDFW.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Mitigation Measure BIO-15: Conduct Preconstruction Plant Surveys within Overhead Line Corridor Work Limits and Implement Avoidance Measures. A qualified botanist/biologist will conduct a botanical survey of the pole replacement and installation work limits prior to the initiation of construction activities within suitable land cover for special-status plants along the overhead line corridor. The survey will follow the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018) along with the CNPS and USFWS survey protocols. The survey(s) would occur during the appropriate blooming period for the special-status plant species with potential to occur within the overhead line corridor. If no special-status plant species are found, no further avoidance measures are required. If special-status plant species are found during botanical surveys, the following measures would be implemented: • If a federally listed plant species (slender Orcutt grass or Sacramento Orcutt grass) is found, the SMUD HCP avoidance and minimization measures identified in the covered plant conservation strategy would be implemented. This includes the implementation of VP-AMM4 Avoid Occupied Orcutt Grass Habitat as described above.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		- If a state-listed plant is found within the overhead line corridor work limits, the botanist will map the extant boundaries of the population and record the number of individuals present. An avoidance buffer along with exclusion fencing will be placed around the area to avoid disturbance to the plants to the greatest extent possible. If avoidance is not possible, SMUD will consult with CDFW to develop mitigation and/or compensation measures necessary to avoid adverse effects to the population. - If a CNPS-listed plant is found within the overhead line corridor work limits, the botanist will map the extant boundaries of the population and record the number of individuals present. An avoidance buffer along with exclusion fencing will be placed around the area to avoid disturbance to the plants to the greatest extent possible. Where it is not feasible to avoid special-status plants locations within the construction areas, seed collection and transplanting shall be performed for annual plant species in affected areas. Prior to excavation work in areas that support occupied special-status plant habitat, the topsoil (roughly the first 3-4 inches of soil where dormant seeds would be present) will be removed and stockpiled onsite. After finished grades generally have been achieved, the stockpiled topsoil will be redistributed within disturbed areas in the project area. In particular, the soil should be redistributed into areas that provide appropriate/suitable habitat for the species.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Stockpiled topsoil will be protected from wind and water erosion and from compaction. In areas where topsoil has been spread, equipment traffic will be limited, to the extent practicable, to minimize compaction. Post construction, areas where topsoil was spread will be protected from wind and water erosion until after the next growing season (spring/summer) using typical stabilization methods. If hydroseeding is used, hydroseed will be comprised of a native seed mix.					
Cultural Resources	Potential for accidental damage to undiscovered archaeological resources during ground-disturbing activities.	Mitigation Measure CUL-1a: Worker Awareness Training. A cultural resources awareness and respect training program will be provided to all construction personnel active on the project site prior to implementation of earth moving activities. A representative or representatives from culturally affiliated Native American Tribe(s) will be invited to participate in the development and delivery of the cultural resources training in coordination with a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists. The program will include relevant information regarding sensitive Tribal cultural resources, including protocols for resource avoidance, applicable laws regulations, and the consequences of violating them. The program will also underscore the requirement for confidentiality and culturally appropriate treatment of any find of significance to Native Americans and protocols, consistent, to the extent feasible, with Native American Tribal values.	Before and during ground-disturbing activities	During ground-disturbing activities	SMUD / Contractor	SMUD	All ground-disturbing activities

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Mitigation Measure CUL-1b: Unanticipated Cultural Resources Discovery. In the event of an inadvertent discovery of cultural resources (excluding human remains or Tribal Cultural Resources [TCRs]) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeology, shall be retained to assess the significance of the find. If the find is determined to be significant by the qualified archaeologist (i.e., because it is determined to constitute either a historical resource, unique archaeological resource, or tribal cultural resource), the archaeologist shall develop appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include, but would not necessarily be limited to, preservation in place (which shall be the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or contiguous block unit excavation and data recovery (when it is the only feasible mitigation, and pursuant to a data recovery plan). If the discovery constitutes a TCR, any data recovery shall be in coordination with Tribes. Curation of resources is not recommended under Tribal protocol and reburial of resources where, or in close proximity to where they were excavated, is preferred.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
Cultural Resources	Potential disturbance to human remains during ground-disturbing activities.	Mitigation Measure CUL-2: Unanticipated Human Remains. Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the District shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.	During ground-disturbing activities	During ground-disturbing activities	SMUD / Contractor	SMUD	All ground-disturbing activities

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
Geology and Soils	Potential for accidental damage to unique paleontological resources during earthmoving activities.	Mitigation Measure GEO-1: Avoid Impacts to Unique Paleontological Resources. - Prior to the start of earthmoving activities associated with the overhead line corridor along Jackson Road northwest of the substation site, SMUD shall retain a qualified archaeologist or paleontologist to present construction worker personnel training. The training shall inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. - If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify SMUD. - In the event of a paleontological discovery, SMUD shall retain a qualified paleontologist to evaluate the resource, and prepare a recovery plan if necessary. The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan shall be implemented by SMUD before construction activities can resume at the site where the paleontological resource or resources were discovered.	Before and during earthmoving activities	During earthmoving activities	SMUD / Contractor	SMUD	Overhead line corridor along Jackson Road northwest of the substation site

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
Hazards and Hazardous Materials	Potential discovery of hazardous materials during earth moving activities.	Mitigation Measure HAZ-1: Manage Accidental Discovery of Hazardous Materials. If contaminated soils or potentially hazardous items are discovered during earth moving activities, all ground-disturbing activities within 25 feet shall be halted until a qualified SMUD employee or SMUD representative can assess the conditions on the site. SMUD will notify and coordinate with the appropriate agency regarding findings of hazardous materials, as necessary. If it is determined that the material cannot be re-incorporated into the project site, it shall be hauled by a qualified hauler to an appropriate waste disposal facility.	During ground-disturbing activities	During ground-disturbing activities	SMUD / Contractor	SMUD	All ground-disturbing activities
Tribal Cultural Resources	Potential for accidental damage to unidentified Tribal Cultural Resources in the project area during ground-disturbing activities.	Mitigation Measure TCR-1: Spot Check Monitoring During Ground-disturbing Activities. There is a potential for unidentified cultural sites, artifacts or unanticipated TCRs to be present below the surface. Therefore, a Tribal monitor from Wilton Rancheria will perform spot check monitoring, up to half-day monitoring, two (2) times per week, during ground-disturbing activities including trenching, excavating, and grading. The Tribe representative will be given 48 hours' notice before ground disturbance starts. The Tribal monitor will complete daily logs. Logs will confirm any finds, the locations of the find, time and date in accordance with SMUD's Inadvertent Discovery Plan. If Tribal cultural resources are identified that have the potential to be adversely affected by the project, SMUD will implement Mitigation Measure TCR-2 Unanticipated Discoveries of Tribal Cultural Resources.	Before and during ground-disturbing activities	During ground-disturbing activities	SMUD / Contractor	SMUD	All ground-disturbing activities

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Mitigation Measure TCR-2: Unanticipated Discoveries of Tribal Cultural Resources. Although surface level TCRs have not been identified for this project, Tribal consultation has shown that there is the potential for unidentified sites of cultural significance to be present in the subsurface context near the Jackson Bulk Substation and associated offsite construction locations. If any suspected TCRs or resources of Tribal cultural significance, including but not limited to features, anthropogenic/cultural soils, cultural belongings or objects (artifacts), shell, bone, shaped stones or bone, or ash/charcoal deposits are discovered by any person during construction activities including ground disturbing activities, all work shall pause immediately within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. Work shall cease in and within the immediate vicinity of the find regardless of whether the construction is being actively monitored by a Tribal Monitor, cultural resources specialist, or professional archaeologist. A Tribal Representative from Wilton Rancheria shall be immediately notified and shall determine if the find is a TCR (PRC §21074). Evaluation and treatment will be performed in coordination with Tribes in accordance with SMUD's Inadvertent Discovery Plan. When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. If redesign is determined to not be feasible, SMUD shall consult with Tribes to determine appropriate treatment of the find.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by Wilton Rancheria. The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate Tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects and belongings, and reburial of cultural objects and belongings or cultural soil. The construction contractor(s) shall provide secure, on-site storage for culturally sensitive soils or objects that are components of TCRs that are found or recovered during construction. Only Tribal Representatives shall have access to the storage. Storage size shall be determined by the nature of the TCR and can range from a small lock box or jobsite work box to a conex box (shipping container). A secure (locked), fenced area can also provide adequate on-site storage if larger amounts of material must be stored.					

CEQA Issue Area	Impacts	Mitigation Measures	Implementation Duration	Monitoring Duration	Responsible for Implementation	Responsible for Monitoring	Applicable Project Component
		The construction contractor(s) and SMUD shall facilitate the respectful reburial of the culturally sensitive soils or objects. This includes providing a reburial location that is consistent with the Tribe's preferences, excavation of the reburial location, and assisting with the reburial, upon request. Any discoveries shall be documented on a Department of Parks and Recreation (DPR) 523 form within 2 weeks of the discovery and submitted to the appropriate CHRIS center in a timely manner. Work at the TCR discovery location shall not resume until authorization is granted by the Lead Agency in coordination with the culturally affiliated Tribe. If articulated or disarticulated human remains, or human remains in any state of decomposition or skeletal completeness are discovered during construction activities, the Sacramento County Coroner shall be contacted immediately. Upon determination by the Sacramento County Coroner that the find is Native American in origin, the Native American Heritage Commission will assign the Most Likely Descendent who will work with SMUD to define appropriate treatment and disposition of the burials. For any work required to be undertaken in an area where shoring or hazardous materials would occur, including soils, all archaeologists, Tribal Representatives, and Tribal Monitors shall meet the appropriate level of safety training (e.g., confined spaces, hazardous material exposure, etc.) in compliance with California Division of Occupational Safety and Health State and federal Occupational Safety and Health Administration requirements prior to entering construction work areas.					

5.0 LIST OF PREPARERS

The following people contributed to the preparation of this document.

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6.0 REFERENCES

None.

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Appendix A Draft IS/MND (As Revised)

RESOLUTION NO. _____

WHEREAS, this Board has adopted policies stating this Board is committed to meeting customers' electrical energy needs (SD-4); demonstrating energy reliability and environmental leadership (SD-7); and ensuring high levels of customer satisfaction (SD-5); and

WHEREAS, SMUD's primary purpose is to supply electrical energy to customers in the Sacramento area; and

WHEREAS, SMUD proposes the **Jackson Bulk Substation Project (Project)** to construct and operate a new substation that would convert high-voltage electricity from 230,000-volt (230 kV) transmission lines to 69,000-volt (69 kV) distribution service through transformers for delivery to residential and commercial customers along the Jackson Highway corridor; and

WHEREAS, the **Project** would include installation of electrical equipment, a control building, driveway access, site fencing, lighting, stormwater drainage, and utilities; and

WHEREAS, SMUD would also grade the remaining 26 acres for drainage improvements and maintain temporary soil storage south of the substation footprint and retain a 200-foot setback from Jackson Road and Excelsior Road; and

WHEREAS, the **Project** additionally includes construction of new or modified overhead power lines to connect the substation to the existing electrical grid to include approximately 0.7 miles of new 69 kV overhead lines and conversion of approximately 5.35 miles of existing 12,000-volt (12 kV) pole and overhead lines to single-circuit 69 kV overhead lines with a 12 kV underbuild, which would require replacement of existing poles with taller, stronger poles; and

WHEREAS, Project construction is anticipated to begin in the first quarter of 2030, with commissioning and energization scheduled for December 2032, for an anticipated construction duration of approximately 36 months; and

WHEREAS, SMUD prepared an **Initial Study/Mitigated Negative Declaration (IS/MND)**, and **Mitigation Monitoring and Reporting Program** for the **Project** that incorporated environmental avoidance, mitigation and improvement measures; and

WHEREAS, the draft **Initial Study, Mitigated Negative Declaration**, and **Mitigation Monitoring and Reporting Program** were posted on the SMUD website, made available in hard copy format at the SMUD Customer Service Center and the SMUD East Campus Operations Center, distributed to members of the Board, interested persons and organizations, public agencies, and landowners and occupants of record within 1,500 feet of the proposed substation site and within 500 feet of the off-site overhead line work; notice was published in the *Sacramento Bee*, inviting public comment; the comment period was open from May 5, 2026, through June 5, 2026; a virtual public meeting was held on May 18, 2026, which was attended by one member of the public; and five public comments were received; and

WHEREAS, all comments received during the public review period have been responded to as appropriate and incorporated into the **Initial Study, Mitigated Negative Declaration** and **Mitigation Monitoring and Reporting Program**; and

WHEREAS, the **Initial Study, Mitigated Negative Declaration** and **Mitigation Monitoring and Reporting Program** are located in the records of SMUD under the custody of the Environmental Services Department; **NOW THEREFORE**,

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

Section 1. This Board has reviewed and considered information in the **Initial Study, Mitigated Negative Declaration, and Mitigation Monitoring and Reporting Program**, together with comments received during the public review period; finds that the **Initial Study, Mitigated Negative Declaration, and Mitigation Monitoring and Reporting Program** as set forth in **Attachment ____** hereto have been completed in compliance with the **California Environmental Quality Act (CEQA)**, the State Guidelines for implementation of **CEQA**, and Board Resolution No. 13-11-03 (Procedures for Implementation of **CEQA**); and finds that the **Initial Study, Mitigated Negative Declaration** and **Mitigation Monitoring and Reporting Program** reflect the independent judgment and analysis of this Board.

Section 2. This Board finds, on the basis of the **Initial Study, Mitigated Negative Declaration** and **Mitigation Monitoring and Reporting Program**, and comments received during the public review period, that there is no substantial evidence that the **Jackson Bulk Substation Project (Project)** may have a significant effect on the environment.

Section 3. Based on the **Initial Study, Mitigated Negative Declaration, Mitigation Monitoring and Reporting Program**, and the findings made by this Board, this Board adopts the **Mitigated Negative Declaration** and **Mitigation Monitoring and Reporting Program** and approves the **Project**. The Environmental Services Department is directed to file with the County Clerk of Sacramento County, a Notice of Determination, which shall set forth the information required by **CEQA**.