

SACRAMENTO MUNICIPAL UTILITY DISTRICT

STAFF REPORT AND FINDINGS ON THE ELECTRIC VEHICLE CHARGING PROGRAMS STANDARD OF PUBLIC UTILITY REGULATORY POLICIES ACT OF 1978 AS AMENDED BY THE INFRASTRUCTURE INVESTMENT AND JOBS ACT OF 2021

A. Background

The Infrastructure Investment and Jobs Act of 2021 (IIJA) amended the Public Utility Regulatory Policies Act of 1978 (PURPA) by adding two new standards that electric utilities, including SMUD (we are considered a “non-regulated utility” under PURPA), must consider and determine the appropriateness of implementing. The stated purpose of PURPA standards is to encourage conservation of energy supplied by electric utilities, efficiency of electric utility facilities and resources, and equitable rates for electric consumers.

On October 20, 2022, through Board Resolution No. 22-10-15, the SMUD Board of Directors commenced consideration of the Electric Vehicle Charging Programs Standard. Under PURPA, the Board is not required to adopt the standard, but is required to consider and make findings on or before November 15, 2023.

On October 18, 2023, the Staff Report and Findings on the Electric Vehicle Charging Programs Standard (Staff Report) will be presented and discussed at a public hearing during the Energy Resources and Customer Services Committee meeting. The Staff Report was made available to the public on SMUD’s web site (www.smud.org) prior to the hearing. Feedback is requested from the public as to the need and desire for SMUD to adopt the Electric Vehicle Charging Programs Standard. Members of the public are welcome to attend the public hearing and provide comments. The Board will consider whether it is appropriate to adopt the Electric Vehicle Charging Programs Standard.

B. Electric Vehicle Charging Programs Standard

The new Electric Vehicle Charging Programs Standard under Section 111(d)(21) of PURPA provides:

Each State¹ shall consider measures to promote greater electrification of the transportation sector, including the establishment of rates that —

- (A) promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure;*
- (B) improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium-, and heavy-duty vehicles;*
- (C) accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and*

¹ “State” is defined to include a nonregulated electric utility, such as SMUD.

(D) appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

Simply stated, PURPA requires the Board to consider whether it is appropriate to adopt the new Electric Vehicle Charging Programs Standard which encourages utilities to promote greater electrification of the transportation sector.

C. SMUD's Electric Vehicle Charging Programs

For more than 30 years, SMUD has been investing in programs and initiatives to advance electric vehicles. SMUD's Board has adopted Competitive Rates SD-2, through Board Resolution No. 21-02-04, which among other things, requires rates be designed to reflect the cost of energy when it is used and equitably allocate costs across and within customer classes. SMUD's Board, through Board Resolution No. 21-04-04, has also adopted Environmental Leadership Strategic-Direction Policy No. 7 (SD-7) which makes environmental leadership a core value of SMUD by, among other things, promoting the advancement of the electrification of vehicles. SMUD's Board, through Board Resolution No. 21-04-04, has also adopted Resource Planning Strategic-Direction Policy No. 9 (SD-9) which prioritizes carbon emissions reduction by, among other things, pursuing vehicle electrification to reduce 1,000,000 metric tons from transportation in 2030 while at the same time improving equity for under-served communities. In addition, SMUD's 2030 Zero Carbon Plan recognizes that widespread adoption of electric vehicles will be key to achieving zero carbon by prioritizing electrification of transportation. Just last year in 2022, staff updated SMUD's Board of Directors on its Enterprise Electric Vehicle Strategy to accelerate the transition to electricity as a transportation fuel to meet the decarbonization goals set out by the 2030 Zero Carbon Plan.

To catalyze this transition, SMUD has initiated cooperative agreements with other entities to advance the electric transportation sector, both at the regional level and on a broader scale. SMUD signed a 4-Agency Memorandum of Understanding, joining Sacramento Area Council of Governments (SACOG), Sacramento Metropolitan Air Quality Management District (SMAQMD), and Sacramento Regional Transit (SacRT) to create a regional zero emission vehicle (ZEV) deployment strategy that prioritizes electrification in under-resourced communities, personal and shared ride vehicles, public and private transit, micro-transit and passenger shuttles, and medium and heavy-duty fleets. SMUD also partnered with Plug In America to launch its dealer engagement program to train, certify and support dealers selling electric vehicles in our service territory and to deploy an online electric vehicle buying guide. This program includes training dealers to convey utility electric vehicle offerings and a \$300 per electric vehicle sales incentive. In addition, SMUD is an active member of the Sacramento PEV Collaborative, Sacramento Clean Air Partnership (CAP), and the West Coast Clean Transit Corridor Initiative (WCCTCI) to accelerate infrastructure planning and deployment of charging plazas along key transportation corridors.

SMUD further expands its collaboration with organizations as grant funding opportunities are made available to synergize regional efforts and magnify the impact of transportation electrification investments. SMUD collaborates with partners to identify grant opportunities that include potential awards to scale charging deployments serving multifamily residents, surrounding communities, and regional corridor fast charging to reduce charging times. For example, SMUD, SACOG, SMAQMD, SacRT, Sacramento Clean Cities, the California Mobility Center, and the Cities of Sacramento and West Sacramento recently completed a California Energy Commission (CEC) funded blueprint study of infrastructure needs to support electrification of the region's medium- and heavy-duty fleets and charting potential paths to position the region for ensuring funding opportunities. This included an inventory of fleet vehicles, forecasts of electric vehicle and charging infrastructure growth, analysis of grid impacts, and an assessment of workforce development needs.

For our residential customers, SMUD's Charge@Home program provides up to \$1,000 in rebates for wiring upgrades and installation of home electric vehicle charging equipment. For residents of multifamily homes, SMUD has several multifamily charging initiatives supporting disadvantaged, low income, and affordable housing communities. We are also upgrading and equipping homes at no cost to the residents for electric vehicle charging for customers participating in the Clean Cars 4 All (CC4A) low-income program, which is run by SMAQMD. Moreover, SMUD's multifamily program conducts comprehensive electrification assessments with recommendations for charger installations through the SMUD Contractor Network and the SMUD eFuelSM Solutions program. Channeling incentive funds through the multifamily program affords needed flexibility for tailored solutions that includes community engagement to educate and inform multifamily residents of the many benefits available through the program. More recently, SMUD was awarded a CEC grant to install over 100 chargers in new, existing, and planned multifamily complexes in partnership with community-based organization Mutual Housing.

For communities and neighborhoods, SMUD helped build and energize Sacramento's first eMobility Hub in the Del Paso Heights neighborhood, an historically under-resourced community. eMobility Hubs support multi-modal electric transportation and serve to connect under-resourced communities to critical support infrastructure like job training. With regional partners SMAQMD, SACOG, SacRT, and Aura Planning, SMUD is actively exploring locations for siting of additional eMobility Hubs by assessing the impact on surrounding communities to determine the efficacy of scaling eMobility Hubs to as many as 52 sites throughout the region as envisioned in the Sacramento Regional Electric Vehicle Strategy document.

SMUD also recognizes the need to provide public fast charging options for those with limited or no access to charging at home, as well as for supporting long distance regional travel. In 2014, SMUD earned the distinction of being one of the first utilities to deploy direct current (DC) fast charging at six sites to address and alleviate concerns about access to charging, range anxiety and charging times. Just recently, the CEC awarded SMUD - in partnership with Sacramento

International Airport, the City of Sacramento, and the California State University, Sacramento (CSUS) – a grant to upgrade the DC fast chargers at two of the six existing sites and to add a seventh SMUD fast charging site on the CSUS campus.

SMUD has also furthered the deployment of fast charging infrastructure by leveraging and supporting third-party investments in electric vehicle charging by providing incentives, assisting with planning and siting of charging facilities, and providing new rate options. For commercial/industrial customers, SMUD offers incentives up to \$30,000 to support the deployment of high-power DC fast chargers (greater than 50 kW) and up to \$15,000 in incentives for electric vehicle purchases by commercial fleets. An additional \$15,000 is available for those who site DC fast chargers in equity locations. We also partnered with Electrify America as one of the first Green City investment focal areas to deploy seven DC fast charging sites. SMUD is also the first utility to directly partner with the CEC and the Center for Sustainable Energy to provide \$1,000,000 in direct incentive dollars to help fund the California Electric Vehicle Incentive Program (CALeVIP) in our service territory. Through 2022, the CALeVIP program has led to the deployment of more than 100 DC fast chargers across our service territory, which significantly reduces charging times for electric vehicles.

SMUD has also begun development of a smartphone electric vehicle app featuring an integrated e-Roaming platform to provide SMUD customers with single account access to multiple charging network partners and to deliver more equitable access and rates for electric charging by residents in multifamily homes and equity communities.

For residential customers, we provide a discounted electric vehicle rate of 1.5 cents per kWh off the standard rate for charging between 12-6 a.m., which reflects the lower marginal cost of energy between these hours and the marginal off-peak price, ensuring there is enough contribution to margin to support the discount to serve the incremental load from electric vehicles. And in July 2022, SMUD launched our commercial pilot electric vehicle rate which is designed to maintain recovery of our marginal costs while mitigating demand charge costs that often come with low utilization in the early stages of charger deployments. The rate is intended to offer site hosts relief from potential demand charges that may inhibit private sector investments.

D. Proposed Findings

1. SMUD has adopted Competitive Rates Strategic Direction No. 2 (SD-2) which, among other things, requires rates be designed to reflect the cost of energy when it is used and equitably allocate costs across and within customer classes.
2. SMUD has adopted Environmental Leadership Strategic Direction No. 7 (SD-7) which makes environmental leadership a core value of SMUD by, among other things, promoting the advancement of the electrification of vehicles.

3. SMUD has adopted Resource Planning Strategic-Direction Policy No. 9 (SD-9) which prioritizes carbon emissions reduction by, among other things, pursuing vehicle electrification to reduce 1,000,000 metric tons from transportation in 2030 while at the same time improving equity for under-served communities.
4. SMUD's 2030 Zero Carbon Plan recognizes that widespread adoption of electric vehicles will be key to achieving zero carbon by prioritizing electrification of transportation. Just last year in 2022, staff updated SMUD's Board of Directors on its Enterprise Electric Vehicle Strategy to accelerate the transition to electricity as a transportation fuel to meet the decarbonization goals set out by the 2030 Zero Carbon Plan.
5. SMUD has initiated cooperative agreements to advance the electric transportation sector, both at the regional level and on a broader scale, including a 4-Agency Memorandum of Understanding, joining Sacramento Area Council of Governments (SACOG), Sacramento Metropolitan Air Quality Management District (SMAQMD), and Sacramento Regional Transit (SacRT) to create a regional zero emission vehicle deployment strategy that prioritizes electrification in under-resourced communities, personal and shared ride vehicles, public and private transit, micro-transit and passenger shuttles, and medium and heavy-duty fleets.
6. SMUD also partnered with Plug In America to launch its dealer engagement program to train, certify and support dealers selling electric vehicles in our service territory and to deploy an online electric vehicle buying guide.
7. SMUD is an active member of the Sacramento PEV Collaborative, Sacramento Clean Air Partnership, and the West Coast Clean Transit Corridor Initiative to accelerate infrastructure planning and deployment of charging plazas along key transportation corridors.
8. SMUD collaborates with partners to identify grant opportunities that include potential awards to scale charging deployments serving multifamily residents, surrounding communities, and regional corridor fast charging to reduce charging times. For example, SMUD, SACOG, SMAQMD, SacRT, Sacramento Clean Cities, the California Mobility Center, and the Cities of Sacramento and West Sacramento recently completed a California Energy Commission (CEC) funded blueprint study of electric vehicle infrastructure.
9. SMUD's Charge@Home program provides up to \$1,000 in rebates for residential wiring upgrades and installation of home electric vehicle charging equipment.
10. SMUD upgrades and equips homes at no cost to the residents for electric vehicle charging for customers participating in the Clean Cars 4 All (CC4A) low-income program.
11. SMUD's multifamily program conducts comprehensive electrification assessments with recommendations for charger installations through the SMUD Contractor Network and the SMUD eFuelsm Solutions program. And SMUD was recently awarded a CEC grant to install over 100 chargers in new, existing, and planned multifamily complexes.
12. SMUD helped build and energize Sacramento's first eMobility Hub in the Del Paso Heights neighborhood, an historically under-resourced community. SMUD is actively exploring locations for siting of additional eMobility Hubs by assessing the impact on surrounding communities to determine the efficacy of scaling eMobility Hubs to as many as 52 sites.

13. SMUD has deployed direct current (DC) fast charging at six sites to address and alleviate concerns about access to charging, range anxiety and charging times, and the CEC recently awarded SMUD a grant to upgrade the DC fast chargers at two of the six existing sites and to add a seventh SMUD fast charging site.
14. For commercial/industrial customers, SMUD offers incentives up to \$30,000 to support the deployment of high-power DC fast chargers (greater than 50 kW) and up to \$15,000 in incentives for electric vehicle purchases by commercial fleets. An additional \$15,000 is available for those who site DC fast chargers in equity locations.
15. SMUD partnered with Electrify America as one of the first Green City investment focal areas to deploy seven DC fast charging sites.
16. SMUD is the first utility to directly partner with the CEC and the Center for Sustainable Energy to provide \$1,000,000 in direct incentive dollars to help fund the California Electric Vehicle Incentive Program in our service territory, which through 2022, led to the deployment of more than 100 DC fast chargers across our service territory.
17. SMUD has begun development of a smartphone electric vehicle app featuring an integrated e-Roaming platform to provide SMUD customers with single account access to multiple charging network partners and to deliver more equitable access and rates for electric charging by residents in multifamily homes and equity communities.
18. SMUD has adopted a residential electric vehicle rate discount of 1.5 cents/kWh off of the standard retail rate and also a commercial pilot electric vehicle rate intended to mitigate demand charges for low utilization at the beginning of charging infrastructure deployments; both of which are designed to recover SMUD's marginal cost by reflecting the cost of energy when it is used and equitably allocate costs across and within customer classes.
19. As reflected in the Strategic Direction, and through its various practices, initiatives, and rates, SMUD's electric vehicle charging programs meet the new federal standard.

E. Recommendation

Staff recommends that the Board adopt the proposed findings and find that the new federal Electric Vehicle Charging Programs Standard is appropriate for use by SMUD.