



# Santa Clara Valley Water District

**File No.:** 20-0069

**Agenda Date:** 7/28/2020

**Item No.:** 9.1.

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## BOARD AGENDA MEMORANDUM

### **SUBJECT:**

Receive Information and Adopt Resolution regarding Electric Vehicle Charging Rates for Santa Clara Valley Water District Electric Vehicle Charging Stations at Almaden Valley Headquarter Campus.

### **RECOMMENDATION:**

- A. Receive information and consider Electric Vehicle Charging Rates for charging stations at Almaden Valley Headquarters Campus; and
- B. Adopt the Resolution ADOPTION OF ELECTRIC VEHICLE CHARGING RATES that sets forth Valley Water Electric Vehicle charging rates that will go into effect on August 1, 2020, and authorizes the Chief Executive Officer or his/her designee at the commencement of each fiscal year to modify the Level 2 and Direct Current Electric Vehicle charging rates subject to not exceeding reasonable cost for providing, operating, and maintaining the charging stations.

### **SUMMARY:**

#### **Regional and Statewide Commitment to EV Technology**

In 2009, San Francisco Mayor, now current State Governor, Gavin Newsom announced a comprehensive plan to make the Bay Area the “Electric Vehicle (EV) Capital of the US.”

Subsequently, in 2013, former Governor Jerry Brown’s released a Zero-Emission Vehicle (ZEV) Action Plan (Plan) outlining California’s commitment to a collaboration of government and business best practices, advocacy for investment in electric vehicles and infrastructure, in addition to setting a new goal of five (5) million EV’s on state roads by 2030. The Plan was enacted by executive order on January 26, 2018.

In 2017, San Francisco Mayor Gavin Newsom, San Jose Mayor Chuck Reed, and Oakland Mayor Ron Dellums committed to and announced a collaborative plan focusing on permitting, incentives for employers, harmonizing local regulations for consistency, government programs, alignment of air quality programs, and roll-out plans for station placement throughout cities, including parking lots and curbside parking. On-going efforts remain consistent with the State’s ZEV Plan.

Additionally, a 2019 report, released by Joint Venture Silicon Valley, indicates that “Silicon Valley’s total number of registered electric vehicles surpassed 80,000 in 2018, comprising nearly 20% of all such vehicles in California, and by far the highest numbers of any region per capita” and “Silicon

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Valley vehicle owners account for 8.3% of all registered light-duty vehicles in California.” Currently, electric vehicles account for 13% of all vehicle sales in Santa Clara County.

### **Almaden Campus EV Upgrade Project**

Valley Water advances regional and state commitments to expand EV technology through the planned expansion and usage of newer EV charger technology throughout its facilities; directly upholding Valley Water’s Mission Pillar for environmental stewardship.

Offering EV charging stations to Valley Water employees and visitors addresses climate change by reducing greenhouse gas emissions produced by tailpipe pollution and lowering the carbon footprint. EVs offer quieter engines to reduce localized noise pollution. Providing EV charging stations demonstrates a commitment to environmental stewardship efforts, attracts and retains top talent, and signals leadership, innovation, and a willingness to adopt advanced technology, while promoting employee satisfaction.

Valley Water’s Almaden HQ Campus EV Upgrade Project updates and expands EV charging stations with new smart charge technology capable of providing users with an interactive experience. This technology’s software continually gets upgraded to ensure the latest features are always available to staff.

In August 2019, as part of Valley Water’s on-going management of its EV charging stations, the Board’s Financial Sustainability Group (Attachment 1) received information on currently installed Valley Water EV charging stations, a sampling of Bay Area agency pricing policies, and provided feedback on proposed pricing options associated with workplace electric vehicle charging station management.

The cost to modernize and annually operate all of Valley Water’s EV charging stations was approximately \$215,000 and \$57,000 respectively.

### **EV Charging Rate Analysis and Recommendation**

Valley Water’s new EV charging stations currently offer free charging for employees and the public, which are budgeted and managed by the General Service’s Division’s Facilities Management Unit. Two (2) different types of charging stations are available for this service. Fourteen Level 2 (L2) chargers which are individually powered by a 240-volt power supply and two (2) Direct Current (DC) 480-volt powered chargers.

Staff recommends that Valley Water seek to recover the reasonable costs for providing EV charging stations by adopting the proposed EV charging rates set forth in the proposed Resolution (Attachment 3). EV charging stations provide environmental benefits, including the reduction of nitrogen oxides released into the atmosphere, which can deposit pollutants into local streams and creeks.

The proposed EV charging rates (Attachment 3.), raises no Proposition 26 issue because the rates

will not result in the collection of charges that are greater than the reasonable cost of providing, maintaining and operating EV charging stations. The proposed EV charging rates do not include the reasonable cost of installation and staff resources.

On December 16, 2019, California's Office of Administrative Law approved amendments to its Electric Vehicle Fueling Systems Specifications. These rules ban operators of EV charging stations from billing by the minute at new 240Vac stations in 2021 onwards, and new DC stations 2023 onwards. To comply with the future regulations, Valley Water is proposing a kWh charging rate structure.

Charging EV users on a kilowatt per hour (kWh) basis rather than hourly basis helps to create equity amongst EV users. Forbes.com explains that "People don't like [hourly] because cars take electricity at different speeds, based on what car you have and how full the battery is. The last 20% of a fill-up can take as many minutes as the middle 50%, and thus cost as much, for much less electricity. As such, people naturally dislike it."

**Table 1. Electric Vehicle Charging Rates (Proposed)**

Rate Types	
	Charging Rate
Level 2 Charging Rate (Per kWh First 4 hours)	\$0.19/kWh*
DC Charging Rate (Per kWh First hour)	\$0.19/kWh*
Escalation Rate Level 2 (Per Hour After 4-Hours)	\$2.00/hour
Escalation Rate DC (Per Hour After 1-Hour)	\$4.00/hour

\*Rate includes Valley Water's \$0.11 kWh charge rate and EV Station Unit's Average Operation and Maintenance per kW service fee of \$0.08

Rate analysis included a sampling of rate structures collected from 26 Bay Area agencies who operate publicly owned EV charging stations and Valley Water's EV charging station usage data since May 2019 (usage data prior to May 2019 is unavailable due to previous system limitations). While some jurisdictions implemented hourly or time-based rates, it was found through research that kWh rates provide equity between slower charging EV models and faster charging EV models. Additionally, escalation rates are consistent with other EV charging stations.

During our rate sampling research, PG&E Residential EV Charging Rates were also sampled. The sampling showed that Valley Water's kWh charging rate is less than PG&E's average residential and EV Programs kWh charge rates (Table 2.). A more detailed depiction of PG&E's residential charge rates can be found in Attachment 2.

**Table 2. Valley Water and Residential kWh Charging Rate Comparison**

Valley Water kWh Charging Rate	\$0.19
PG&E Residential kWh Average Charging Rate	\$0.261
PG&E EV2 Program* kWh Average Charging Rate	\$0.314
PG&E EVB Program** kWh Average Charging Rate	\$0.290

\* PG&E EV2 Program combines your vehicle's electricity costs with those of your residence

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**\*\*PG&E EVB Program** involves the installation of another meter, which separates your vehicle's electricity costs from those of your home.

The proposed rate schedule is a kWh charge rate structure with an hourly escalation rate for charging that exceeds allotted charging periods (i.e. 4 hours for Level 2 charging stations and 1 hour for DC charging stations). This rate structure creates equity in that for the allotted charging periods, EV users are only charged for the amount of kW used to charge their vehicle. This kWh charge rates contribute towards cost recovery of Valley Water's utility costs, annual service plan fees, staff resource costs, and operational costs.

The rate structure also provides for hourly escalation rates if an EV remains at a Level 2 EV charging station for more than 4 hours or at a DC charging station for more than 1 hour. The escalation rates provide a self-regulating system that deters EV drivers from staying in the EV charging space after the allotted hours noted above. Since the escalation rates are considered penalties, Proposition 26 does not limit the use of revenue collected based on those escalation rate to Valley Water's reasonable cost of providing, maintaining and operating the EV charging stations.

The proposed rate structure will provide an opportunity for the Valley Water to recover its electricity costs at its EV charging stations, which help support Valley Water's focus of environmental stewardship. Administration requires minimal staff resources to implement rate structures as the newer technology administers a billing system used for the charging stations.

### **Future Valley Water EV Expansion Opportunities**

Ongoing opportunities to expand EV charging station infrastructure throughout Valley Water facilities are being considered. This includes pursuing grant opportunities to expand the number of EV charging stations and conducting assessments to plan for the transition to electric fleet vehicles.

### **FINANCIAL IMPACT:**

This action will authorize Valley Water to generate approximately \$57,000 per year to recover the anticipated reasonable annual cost to provide, operate and maintain Valley Water's EV charging stations. Staff estimates the annual reasonable cost will fluctuate depending on actual use.

### **CEQA:**

The recommended action does not constitute a project under CEQA because it does not have the potential for resulting in direct or reasonably foreseeable indirect physical change in the environment.

### **ATTACHMENTS:**

Attachment 1: PowerPoint

Attachment 2: Rate Analysis and Fact Sheet

Attachment 3: Resolution

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**UNCLASSIFIED MANAGER:**

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