

Date of Hearing: April 25, 2022

ASSEMBLY COMMITTEE ON TRANSPORTATION

Laura Friedman, Chair

AB 2703 (Muratsuchi) – As Amended April 18, 2022

SUBJECT: Electric vehicle charging stations: reliability standards: low-income and disadvantaged community financial assistance

SUMMARY: Requires the Energy Resources Conservation and Development Commission (CEC) to develop a program to provide financial assistance for electric vehicle (EV) charging stations, requires CEC to develop reliability standards for electric vehicle charging stations, and conditions state funding on compliance with reliability standards. Specifically, **this bill:**

- 1) Requires CEC, upon appropriation by the Legislature, to develop a program to provide financial assistance to low-income and disadvantaged community members to use EV charging stations.
- 2) Requires the program to make financial assistance available through an open-loop, reloadable payment card that has both EMV chip and contactless capabilities and that is readily accessible to all low-income and disadvantaged community members in the state.
- 3) Prohibits the program from limiting the choice of the person receiving the financial assistance with regard to the provider of the EV charging station.
- 4) Requires CEC to establish eligibility criteria for the program that are similar to programs that provide financial assistance to low-income and disadvantaged communities for public transit and service from electric corporations.
- 5) Requires CEC to establish the amount of financial assistance that is available to each individual eligible to receive assistance under the program.
- 6) Authorizes the CEC to contract for professional services in implementation and administration of the program.
- 7) Authorizes CEC to develop different standards based on technology type, including direct current fast charging (DCFC) stations, Level 2 charging stations, and off-grid charging stations.
- 8) Authorizes CEC to develop requirements and incentives for increasing compliance with the reliability standards.
- 9) Requires, beginning no later than July 1, 2023, as a condition of receiving state funding or other incentives to deploy a publicly available EV charging station, the recipient of the state funding or incentive to agree to operate the station in compliance with the reliability standards developed by CEC.
- 10) Requires CEC to publish data on compliance with the reliability standards as part of the Electric Vehicle Charging Infrastructure Assessment.

- 11) Requires CEC to protect the confidential information of an entity subject to this section, including, but not limited to, by anonymizing and aggregating the compliance data to ensure an individual entity's data is not identifiable in the commission's assessments.
- 12) Makes findings related to the protection of confidential and proprietary information of entities subject to the requirements of this bill.
- 13) Defines "open-loop" as redeemable upon presentation at multiple, unaffiliated merchants for goods or services.
- 14) Defines "charging station" as an electrical component assembly or cluster of component assemblies designed specifically to charge batteries within electric vehicles by permitting the transfer of electric energy to a battery or other storage device in an EV.

EXISTING LAW:

- 1) Establishes CEC, with five Governor appointed members, to, among other duties, assess trends in electrical energy consumption, analyze energy forecasts, carry out energy conservation measures, and research and develop alternative sources of energy.
- 2) Authorizes the California Air Resources Board (CARB) to adopt interoperability billing standards for network roaming payment methods for EV charging stations.
- 3) Requires, if CARB adopts interoperability standards, that all EV charging stations that require payment, meet the imposed interoperability standards within one year.
- 4) Requires CARB, when adopting interoperability standards for EV charging stations, to consider industry-developed interoperability billing standards and authorizes CARB to adopt interoperability billing standards promulgated by outside authoritative bodies.
- 5) Requires CEC, working with CARB and the Public Utilities Commission (CPUC), to prepare a statewide assessment of the EV charging infrastructure needed to support the levels of EV adoption required for the state to meet its goals of putting at least five million zero-emission vehicles (ZEV) on California roads by 2030, and of reducing emissions of GHGs to 40% below 1990 levels by 2030.
- 6) Requires CPUC to continue a program of assistance to low-income electric and gas customers with annual household incomes that are no greater than 200% of the federal poverty guideline levels, and prohibits the cost of the program from being borne solely by any single class of customer.
 - a) For one-person households, program eligibility shall be based on two-person household guideline levels.
 - b) The program shall be referred to as the California Alternate Rates for Energy, or CARE program; and,
 - c) The commission shall ensure that the level of discount for low-income electric and gas customers correctly reflects the level of need.

FISCAL EFFECT: Unknown

COMMENTS:

Executive Order (EO) N-79-20 states the goal that 100% of new passenger vehicles sales in California will be ZEVs by 2035. The EO directs CARB to develop and propose regulations to meet that goal. Increased adoption of battery electric vehicles necessitates a corresponding increase in the supporting charging infrastructure. Deploying more charging stations will help consumer confidence in locating charging stations and transitioning to battery electric vehicles.

For passenger vehicle charging in 2030, the AB 2127 Electric Vehicle Charging Infrastructure Assessment projects over 700,000 public and shared private chargers are needed to support 5 million ZEVs, and nearly 1.2 million to support about 8 million ZEVs anticipated under Executive Order N-79-20.

Existing EV infrastructure is less accessible for disadvantaged populations, particularly low-income communities¹. One reason for these disparities is that low-income drivers tend to live in multi-unit dwellings, where both property owners and outdated building codes create barriers against residents installing chargers². This inability to access home charging disincentivizes EV adoption, meaning that these populations are further excluded from economic benefits, such as savings over vehicle lifetime (10 years, 120,000 miles) that result from reduced fuel and maintenance costs³.

Cost of EV charging may be a barrier to ZEV adoption for low-income persons. This bill seeks to provide financial assistance for EV charging for lower income individuals. Lower income individuals may be less likely to have access to home charging because they live in multi-unit dwellings and therefore would be more likely to rely on potentially more expensive charging at retail locations. Many surveys have identified barriers to ZEV adoption such as upfront costs, range anxiety, and lack of infrastructure. It is unclear if the cost of EV charging at retail locations is a barrier for lower income persons and if lowering the charging price will be the incentive needed to attract low-income drivers. This should be carefully considered, especially given the potential cost of such a program.

Is this the one and best solution? If the Legislature decides that the price of EV charging at retail locations is a barrier that needs to be overcome to help the adoption of ZEVs, more work needs to be done to determine how to best provide financial assistance. Given the potential administrative costs associated with implementing such a program, the Legislature may wish to carefully consider how to proceed. Some examples of different charging and energy financial assistance programs follow.

Existing vehicle grant programs offer charging assistance for lower-income residents. The statewide Clean Vehicle Assistance Program (CVAP) and the regional Driving Clean Assistance Program in the Bay Area and Sacramento help lower-income residents finance used or new conventional hybrid electric, plug-in hybrid electric, battery electric, or fuel cell electric vehicles. The Beneficial State Foundation administers CVAP, and offers eligible applicants price buy-

¹ Song, C.C. "Electric Vehicles: Who's Left Stranded?" *The Greenlining Institute*. 2011.

² Joselow, Maxine. "Electric Car Advocates Want to Expand Access to Low-Income Communities". *E&E News*. June 20, 2018.

³ Malmgren, Ingrid. "Quantifying the Societal Benefits of Electric Vehicles". *World Electric Vehicle Journal* 8 (2016).

down grants of up to \$5,000 and financing opportunities ($\leq 8\%$ interest); including up to \$2,000 for a Level 2 home charger installation for eligible vehicle purchases or a \$1,000 prepaid charge card and a free portable Level 1 charger. To date, CVAP has issued about 1,900 charge cards out of a total of about 2,700 grants for charging support. That means about 70% of the program participants are opting for the prepaid charge cards. Similarly, the regional Driving Clean Assistance Program offers \$2,000 for an at home charger or prepaid card to participants who purchase an EV through the program.

Public utility companies offer discounts on energy bills for income qualified households. Low-income customers that are enrolled in the CARE program receive a 30-35% discount on their electric bill and a 20% discount on their natural gas bill. For the CARE program, electrical corporations with 100,000 or more customer accounts in California offer a 30% - 35% discount as required by existing law. Electrical corporations with fewer than 100,000 customer accounts in California offer a 20% discount. Customers may also be eligible for CARE if they are enrolled in certain public assistance programs. Families whose household income slightly exceeds the CARE allowances qualify to receive Family Electric Rate Assistance (FERA) Program discounts, which applies an 18% discount on their electricity bill. FERA is available for customers of Southern California Edison, San Diego Gas and Electric Company, and Pacific Gas and Electric Company.

The Electric Vehicle Charging Stations Open Access Act: CARB adopted the Electric Vehicle Supply Equipment (EVSE) Standards Regulation to implement SB 454 (Corbett), Chapter 418, Statutes of 2013 and to establish requirements for EVSE to build driver confidence in accessing public charging infrastructure. Under the regulations developed by CARB, EVSE must be accessible to drivers regardless of membership in an Electric Vehicle Service Provider (EVSP) network. EVSPs must operate a credit card reader device physically located on either the EVSE unit or a nearby kiosk. The credit card reader device must accept, at a minimum, the Euro MasterCard Visa (EMV) chip and, at a minimum, one of the following credit card types: Visa, MasterCard, or American Express. A DCFC installed on or after January 1, 2022 must comply with the open access requirements. Existing DCFCs must comply when replaced, but no later than July 1, 2033. New Level 2 EVSEs have a later compliance deadline of July 1, 2023, but existing Level 2s have the same retrofit date.

Recent CARB regulations require chip readers on charging stations. This bill is intended to align with existing CARB regulations adopted pursuant to SB 454 requiring EMV chip readers on charging stations. The author may wish to consider involving CARB in a consultative role for any financial assistance program developed by CEC that requires payment at the charging station in order to ensure consistency.

This bill grants broad authority to CEC to establish reliability standards and conditions state funding upon compliance with those standards. Although statewide data on charging stations' performance does not exist, anecdotally the charging experience for drivers is unreliable. Drivers face situations where publicly available charging stations charge at far slower speeds than displayed, are broken upon arrival, incorrectly advertised by operators, or fail to start charging when plugged in. In 2020, Plug In America surveyed over 4,000 EV owners and 54% reported experiencing problems with public charging, with broken chargers being the most common issue. State planning documents and past budget legislation have determined that tracking and measuring charging station performance is critical to ZEV adoption; however, there is no policy guidance as to how reliability standards will be set. The Legislature may wish to consider if more

details are necessary, or if it's best left to CEC to determine, such as differing standards based on location or usage type. For example workplace charging may have different reliability requirements than public retail charging. The California Electric Transportation Coalition has a support if amended position that "recommends adding language to this bill that includes the data and reporting requirements and requirement for a public process to develop the reliability standards."

According to the author, "California is a leader in the fight for clean air and for climate action. For California to reach its goal of five million ZEVs on our roads by 2025, we need to invest in our electric vehicle charging infrastructure to make charging more convenient, reliable, and equitable, in all communities throughout the state. As an electric vehicle owner, I know how important it is to make electric vehicle charging more convenient and reliable. That's why we need to not only build more electric vehicle charging stations, but also make sure that they work reliably. As a longtime Los Angeles County resident, I have seen firsthand the inequitable impact of air pollution from cars and trucks on our families and neighborhoods. That's why I'm fighting for this bill – to make sure low income communities and communities of color are not left behind as California moves toward a zero-emission future. All communities deserve clean and healthy air. We need to make zero emission vehicles more accessible in low-income communities and communities of color by providing financial assistance for ZEV fueling stations, e-bikes, e-scooters, and electric vehicle ridesharing services."

In support, the California Environmental Voters write, "Californians deserve to have equal access to a zero-emission transportation system. We have seen low-income and disadvantaged communities, who have long borne the brunt of transportation related pollution, fall behind with no access to clean transportation and worse, these areas are known to be charging deserts due to nonexistent electric vehicle charging infrastructure."

Related and previous legislation: AB 2061 (Ting) of this session requires CEC to calculate uptime for EV charging infrastructure and requires that an entity that receives state incentives for charging infrastructure report uptime to CEC. AB 2061 is currently pending in the Assembly Utilities and Energy Committee.

SB 129 (Skinner), Chapter 65, Budget Act of 2021 requires CEC to collect specified data from recipients of ZEV infrastructure funding for that year's appropriations.

AB 1424 (Berman) of 2019 would have required EV charging stations to allow a person to pay via a toll-free telephone number to process a credit card payment or via an onsite capacity for credit card payment by a contactless credit card, EMV chip, or magstripe card reader. The bill would have also delayed the adoption of interoperability standards for network roaming payment methods for electric vehicle charging stations until January 1, 2021. AB 1424 was held in the Senate Appropriations committee.

SB 1000 (Lara), Chapter 368, Statutes of 2018 requires CEC, in consultation with CARB, to assess whether charging station infrastructure is disproportionately deployed by population density, geographical area, or population income level.

AB 2127 (Ting), Chapter 365, Statutes of 2018 requires CEC, working with CARB and CPUC, to prepare a statewide assessment of the electric vehicle charging infrastructure needed to support 5 million ZEVs on the road by 2030.

SB 454 (Corbett), Chapter 418, Statutes of 2013, established the Electric Vehicle Charging Stations Open Access Act which among other things, prohibited the provider of an electric vehicle charging station from requiring a subscription or membership as a condition of using the station; required the total actual charges for the use of an electric vehicle charging station, including any network roaming charges, be disclosed at the point of sale; required that an electric vehicle charging station accept payment by credit card or mobile technology, or both; and authorized CARB to adopt interoperability billing standards for network roaming payment methods for electric vehicle charging stations.

REGISTERED SUPPORT / OPPOSITION:

Support

Chargepoint (sponsor)
350 South Bay Los Angeles
350 Southland Legislative Alliance
Beam Global
Breathe California
California Environmental Voters (formerly Clcv)
City of Long Beach
Climate Reality Project, San Fernando Valley
Electric Vehicle Charging Association

California Electric Transportation Coalition (support if amended, see details in analysis)

Opposition

None on file

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