

Date of Hearing: April 5, 2017

**ASSEMBLY COMMITTEE ON COMMUNICATIONS AND CONVEYANCE**

Miguel Santiago, Chair

AB 1082 (Burke) – As Introduced February 16, 2017

**SUBJECT:** Transportation electrification: electric vehicle charging infrastructure: schools

**SUMMARY:** Requires an electrical corporation to file with, and the California Public Utilities Commission (CPUC) to approve, a program proposal for the installation of electric charging stations at school facilities. Specifically, **this bill:**

- 1) Requires an electrical corporation to file with the CPUC a program proposal for the installation of electrical grid integrated level-two charging stations at school facilities, by July 30, 2018.
- 2) Defines “school facility” to mean owned or leased improved real property used for the purpose of the private or public education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, or in any combination thereof, or any other facility of a school district or county office of education where specified activities are provided, but does not include any private school in which education is conducted primarily in private homes.
- 3) Requires the CPUC to review and approve, or modify and approve, the program proposal filed by the electrical corporation, by December 31, 2018.
- 4) Specifies that the charging stations installed pursuant to the approved program may be used by faculty, students, and parents, before, during, and after school hours at those times that the school facilities are operated for purposes of providing education or school-related activities, including, but not limited to, parent-teacher conferences, clubs, theater, and athletic events, and by any other persons present for those activities and events.
- 5) Requires the electrical corporation to install, own, operate, and maintain the charging equipment.
- 6) Requires the approved program to include a reasonable mechanism for cost recovery by the electrical corporation.
- 7) Requires schools receiving charging stations pursuant to the approved program to participate in a time-variant rate approved by the CPUC.

**EXISTING LAW:**

- 1) Requires California Air Resources Board (CARB) to adopt rules and regulations that would reduce the states greenhouse gas (GHG) emission levels to 1990 levels by 2020. (Health and Safety Code (HSC) Section 38500 et seq.)
- 2) Establishes the California Renewables Portfolio Standard Program which requires retail sellers of electricity to procure 33 percent of retails sales of electricity, by 2013, and 50

percent by 2030, from eligible renewable energy resources. (Public Utilities Code (PUC) Section 399.11, et seq.)

- 3) Requires each electrical corporation to propose a cost recovery plan to the CPUC for the recovery of the uneconomic costs of an electrical corporation's generation-related assets and obligations, as specified. (PUC Section 368)
- 4) Requires the CPUC to establish rates using cost allocation principles that fairly and reasonably assign to different customer classes the costs of providing service to those customer classes, consistent with the policies of affordability and conservation. (PUC Section 739.6)
- 5) Provides CARB with primary responsibility for control of mobile source air pollution, including adoption of rules for reducing vehicle emissions and the specification of vehicular fuel composition. (HSC Section 39000, et seq., and Section 39500, et seq.)
- 6) Requires CARB to adopt and implement motor vehicle emission standards, in-use performance standards, and motor vehicle fuel specifications for the control of air contaminants and sources of air pollution which CARB has found to be necessary, cost effective, and technologically feasible, to carry out specified purposes. (HSC Section 43013, et seq.)
- 7) Requires CARB, in consultation with CPUC and with input from relevant state agencies and the public, to develop and publish a study on barriers for low-income customers to zero-emission and near-zero-emission transportation options, including those in disadvantaged communities, as well as recommendations on how to increase access to zero-emission and near-zero-emission transportation options to low-income customers, including those in disadvantaged communities, by January 1, 2017. (Public Resources Code Section 25327)

**FISCAL EFFECT:** Unknown. This bill is keyed fiscal by the Legislative Counsel.

**COMMENTS:**

- 1) **Authors Statement:** "Given that the transportation sector represents a significant percentage of California's Greenhouse Gas Emissions and that these emissions result in serious health issues with many Californians, we have led the nation with our policies, investments, and our ambitious goal of 1.5 million [zero emissions vehicles] (ZEV) on our roads by the year 2025. Our policies have driven investments in technologies which have made owning a ZEV a reality for many Californians. Unfortunately, there are still barriers to consumers for the adoption of ZEVs including cost, financing, and range anxiety as a result of a lack of an adequate charging network. AB 1082 is a critical piece for lessening consumers' concerns over range anxiety."
- 2) **Background:** ZEVs run on electricity stored in batteries instead of fossil fuels, such as pure battery plug-in electric vehicles, plug in hybrid vehicles and hydrogen fuel cell electric vehicles. In 2006, the Legislature enacted AB 32 (Nunez) Chaptered 488, Statutes of 2006, which required CARB to adopt rules and regulations that would reduce GHG emissions in the state to 1990s by 2020. In addition, in 2015, the Legislature enacted SB 350 (De Leon) Chapter 547, Statutes of 2015, which established new energy efficiency and renewable

electricity targets to support the state's climate goals. Transportation emissions represent approximately 37 percent of the states GHG emission, 83 percent of its NOx emissions, and 95 percent of its diesel emissions. In implementing AB 32, CARB found that efficient, ZEVs using low carbon fuels are a vital component of the state's effort to reach its GHG emission reduction goals. CARB estimates that by mid-century, 87% of cars on the road will need to be full ZEVs, putting California on the path to reducing GHG emission by 80% by 2050.

- 3) **California's ZEV Action Plan:** In 2012, Governor Brown signed Executive Order B-16-12 which directed the CPUC and other state agencies to help accelerate the market for ZEVs to support the adoption of 1.5 million ZEVs on California roads by 2025 and the integration of plug-in electric vehicle charging into the state's electricity grid by 2020. As of the summer of 2016, Californians drive 47% of all ZEVs on the road in the US with Los Angeles and Santa Clara County being the largest ZEV metropolitan adoption regions in the state. In October 2016, the Governor's Interagency Working Group on ZEVs released its 2016 ZEV Action Plan, which provides an updated roadmap towards reaching the states ZEV goals. The plan highlighted certain priorities for ZEV development and adoption including, raising consumer awareness and education about ZEVs; ensuring ZEVs are accessible to a broad range of Californians, making ZEV technologies commercially viable in targeted sectors, and aiding ZEV market growth beyond California.
- 4) **Investments in ZEV Infrastructure:** Since 2012, California's ZEV market has grown significantly through the expansion of rebates and incentives. California's three investor owned utilities (IOUs) provide rebates to plug-in electric vehicle drivers, including Pacific Gas & Electric's Clean Fuel Rebate, San Diego Gas & Electric's (SDG&E) Electric Vehicle Climate Credit, and Southern California Edison's Clean Fuel Rewards. Customers who purchase electric vehicles may also be eligible for rebates through the states Clean Vehicle Rebate Project which has issued nearly \$350 million in rebates since 2009. In addition, the IOUs are currently implementing pilot programs to install 12,500 electric vehicle charging stations in multi-unit dwellings, workplaces, and public interest destinations at a cost of \$197 million, with a certain number of charging stations designated in disadvantaged communities.
- 5) **Barriers to ZEV Adoption:** The average California drives less than 40 miles per day, well within the range of available ZEV models. However, achieving the states climate goals requires multiple approaches toward transportation electrification. Although battery technology will continue to advance, the lack of ZEV charging infrastructure continue to impede ZEV adoption. Because ZEVs require longer charge times, the lack of infrastructure impedes the adoption of ZEVs in rural areas or for drivers seeking to make longer trips.

This bill requires an electrical corporation to file with, and the CPUC, to approve, a program proposal for the installation of electric charging stations at K-12 school facilities. The development of more ZEV charging stations in long-dwell locations, such as school, could provide an additional incentive for teachers and staff to adopt ZEVs. However, to ensure increase access to ZEVs to low income households and residents in disadvantaged communities, priorities should be made to such areas to ensure that ratepayer funds are not solely used to benefit driver who can afford ZEVs while leaving those who cannot behind.

The author may wish to consider an amendment to require electrical corporations to prioritize locations in disadvantaged communities and at low-income schools.

Furthermore, depending on the cost ZEVs, such incentive might be effective for those customers who can afford and are on the margins of deciding whether or not to buy a ZEV, but the cost of ZEVs might still be out of reach for teachers and staff in low income schools or in disadvantaged communities. It is unclear whether deploying ZEV charging stations in such communities would result in greater ZEV adoption. If the cost of ZEV is out of range for drivers in low-income and disadvantage communities, the deployment of charging stations in such areas would result in stranded assets for the utilities at a cost to ratepayers. The author may wish to consider implementing the bill as a pilot project moving forward.

**6) Suggested Amendment:**

740.13 (x) An electrical corporation shall prioritize school facilities in low income and disadvantaged communities pursuant to the approved program.

**7) Arguments in Support:** According to SDG&E, “Widespread installation of electric vehicle charging stations is an essential ingredient to meeting the State’s goal of installing sufficient charging infrastructure to support 1.5 million [ZEVs] on the road by 2025 [...] The State must reduce transportation sector emissions if it is going to successfully fight climate change. Schools are an ideal location for charging infrastructure because infrastructure would be utilized during school hours by teachers, staff, volunteers, and students who could take advantage of energy generated by renewables in the middle of the day.”

**8) Arguments in Opposition:** According to The Utility Reform Network, “While we agree that public infrastructure for EV charging stations is important, we feel strongly that the funding mechanism for these initiatives cannot fall solely on the backs of ratepayers. AB 1082 asks ratepayers to shoulder the cost of a new infrastructure initiative for EV charging states at school. However, the three major [IOUs] already have EV charging station programs that are available for school to participate in [...] California has among the highest electric rates in the United States causing hardship for millions of California to receive basic energy services. Therefore, any spending must be targeted to archive state goals at the lowest cost to ratepayers.”

**9) Double-referral:** *This bill is double referred, and if passed by this Committee, will be referred to the Assembly Committee on Education.*

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

American Lung Association  
 Boys & Girls Clubs of Greater San Diego  
 California Greenworks  
 California State Association of Electrical Workers  
 California State Pip Trades Council  
 Classroom of the Future Foundation  
 Ford Motor Company  
 Metropolitan Area Advisory Committee  
 Orange County Coastkeeper  
 San Diego Gas & Electric  
 Southern California Edison

Western States Council of Sheet Metal Workers  
One Individual

**Opposition**

The Utility Reform Network (unless amended)

**Analysis Prepared by:** Edmond Cheung / C. & C. /