Date of Hearing: April 26, 2017

ASSEMBLY COMMITTEE ON EDUCATION Patrick O'Donnell, Chair AB 1082 (Burke) – As Amended April 17, 2017

[Note: This bill was doubled referred to the Assembly Communications and Conveyance Committee and was heard by that Committee as it relates to issues under its jurisdiction.]

SUBJECT: Transportation electrification: electric vehicle charging infrastructure: schools

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

- 1) Requires, by July 30, 2018, an electrical corporation to file with the PUC a program proposal for the installation of electrical grid integrated level-two charging stations at school facilities. Requires, by December 31, 2018, the PUC to review and approve, or modify and approve, the program proposal filed by the electrical corporation.
- 2) Authorizes the charging stations to 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.
- 3) Specifies that the electrical corporation shall install, own, operate, and maintain the charging equipment.
- 4) Specifies that the approved program shall include a reasonable mechanism for cost recovery by the electrical corporation.
- 5) Specifies that schools receiving charging stations pursuant to the approved program shall participate in a time-variant rate approved by the PUC.
- 6) Requires an electrical corporation to prioritize in its proposal schools located in disadvantaged communities, defined as communities identified by the California Environmental Protection Agency pursuant to the Greenhouse Gas Reduction Fund Investment Plan and Communities Revitalization Act.
- 7) Defines, for the purposes of this bill, "school facility" as 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 education or school-related activities are provided, but does not include any private school in which education is conducted primarily in private homes.

8) Finds and declares that it is the policy of the state and the intent of the Legislature to encourage transportation electrification and to reach the aggressive goals for reducing emissions of greenhouse gases.

EXISTING LAW: Establishes, in the Health and Safety Code and the Public Utilities Code, requirements to reduce greenhouse gas emission and requires California Air Resources Board (ARB) 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 ARB has found to be necessary, cost effective, and technologically feasible, to carry out specified purposes.

FISCAL EFFECT: Unknown

COMMENTS: This bill requires an electrical corporation to file with the PUC a program for the installation of electrical charging stations at private and public school facilities, and requires the PUC to review and approve the proposal by December 31, 2018. The electrical corporation would install, own, operate and maintain the charging equipment, which are intended to be used by faculty, staff, and parents before, during, and after school. An amendment was adopted in the Communications and Conveyance Committee, at the recommendation of the Committee, to require electrical corporations to prioritize school facilities located in low income and disadvantaged communities. This is to expand access of electric vehicle (EV) ownership to individuals in low-income communities.

The author states, "The transportation sector accounts for 40% of greenhouse gas (GHG) emissions, in California. The effects of these emissions manifest themselves as respiratory and pulmonary diseases in California residents, issues which become more profuse each year, especially in areas heavily saturated with GHG emissions. Governor Jerry Brown, as a response to this pollution, signed Executive Order B-16-2012 ordering the deployment of 1.5 million ZEVs [zero emission vehicles] in California, by 2025, the reduction of GHG emissions to 80% of 1990 levels, by 2050. As interim goals to these objectives, the Air Resource Board (ARB) set a target of 15.4% of new vehicle sales be ZEVs and a reduction of GHG emissions to 40% of 1990 levels, by 2025. However, according to a report published by the Natural Resources Defense Council regarding utility companies' contributions to expanding the EV market, a dramatic increase in the number of publicly accessible charging stations from 10,000 today to an estimated 125,000 and 220,000 by 2020 is needed to support the expansion to the 2025 EV market. Additionally, the report cited consumers' top four reasons for rejecting EVs as all related to the lack of infrastructure; namely length of time to charge, concerns over battery depletion while driving, lack of charging stations and concern over driving range."

According to the Communications and Conveyance Committee, "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. The average California drives less than 40 miles per day, well within the range of available ZEV models. However, achieving the state's 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."

California Building Code. Beginning in 2015, the California Building Code requires all new construction to be wired for Level 2 electric car charging stations. According to the Division of State Architect, the agency that approves all new construction or modernization plans for school facilities, regulations to require the electrical infrastructure of all new construction of schools to include capacity to support charging stations will be considered during the next update of regulations that will take effect in 2019.

According to the California Department of Education, there are 10,393 schools in California, of which 325 are nonpublic nonsectarian schools. It is unclear how many of these schools have parking lots or the infrastructure necessary to accommodate EV charging equipment.

LEA concerns. Concerns have been raised by LEAs as to whether LEAs are required to participate, whether charging stations must be opened to the public at all times, who pays for the electricity, whether the programs will accommodate school buses, whether LEAs can enter into other agreements separate from those established by this bill, and whether LEAs can request removal of equipment.

Author's amendments. In response to the concerns, the author has agreed to the following amendments, which will be adopted as Committee amendments:

- 1) Clarify that access to charging stations shall be determined by LEAs and private schools who participate in the programs. This amendment will ensure that LEAs are able to establish guidelines on who has access to charging stations and when charging stations are available that are consistent with laws and district policies on entry onto schoolsites.
- 2) Clarify that construction and maintenance of the infrastructure and equipment shall be managed in coordination with LEAs and private schools.
- 3) Clarify that any program approved by the PUC pursuant to this bill will not prevent LEAs or private schools from entering into other transportation electrification programs.
- 4) Clarify that LEAs may request removal of any charging infrastructure installed pursuant to the programs established by this bill by providing 180 days' notice to the electrical corporation.
- 5) Establish parameters for the installation of charging infrastructure for transportation vehicles, such as school buses owned by LEAs.

Committee amendments. Staff recommends the following additional amendments:

- 6) Clarify that the programs established by this bill are voluntary for LEAs and private schools.
- 7) Clarify that LEAs and private schools may require users of charging stations to pay for electricity costs.

Arguments in support. The Classroom of the Future Foundation supports the bill and states, "K-12 school facilities represent a unique opportunity to encourage ZEV use while also supporting local community efforts to clean up the air and combat climate change. Providing electric vehicle charging infrastructure at our educational institutions and facilities will not only give students, teachers, parents, staff and other educational staff another location to charge electric vehicles, but it will also provide an opportunity to educate the next generation on the importance of clean transportation."

Arguments in opposition. The Utility Reform Network (TURN) has an oppose unless amended position. TURN states, "Under 1082, large investor-owned utilities (IOUs) are not required to make any out-of-pocket expenditure to fund the infrastructure projects. Yet, these utilities would be directed [to] take ownership of the equipment and system, and as a result, would receive a return on the investment. Before ratepayers are asked to once again shoulder 100% of EV infrastructure funding, alternatives should be fully explored." TURN suggests finding alternative sources of funding or making the IOUs responsible for a portion of the infrastructure costs, absorbing some burden that would otherwise fall to the ratepayers.

Related legislation. There are a number of bills introduced this session to incentivize purchase of ZEVs and near-zero emission vehicles. They include:

AB 33 (Quirk), pending in the Assembly Communications and Conveyance Committee, requires the PUC by March 30, 2018 to authorize electrical corporations to offer programs and investments in residential electric vehicle service equipment.

AB 188 (Salas), pending in the Assembly Appropriations Committee, requires the ARB to update the enhanced fleet modernization program guidelines to allow participants to replace their vehicle with a light-duty trucks so long as they are retiring a pickup truck and the replacement truck meets the fuel efficiency standard for minivans.

AB 193 (Cervantes), pending in the Assembly Transportation Committee, establishes a clean vehicle rebate project (CVRP) program for used vehicles. Incentives could also be used for the replacement or refurbishment of a battery or an extended service warranty to cover repair costs associated with "unique problems" in eligible used vehicles. Eligibility would be restricted to low- and moderate-income customers in disadvantaged communities and live in either a nonattainment air basin or has received minimal amounts from the CVRP program.

AB 544 (Bloom), pending in the Assembly Transportation Committee, creates a new program (upon expiration of the existing program) to allow super ultra-low emission vehicles and transitional zero-emission vehicles access to high-occupancy vehicle lanes for an approximately four-year period, regardless of vehicle occupancy level.

AB 615 (Cooper), pending in the Assembly Appropriations Committee, makes permanent the current income restrictions in the CVRP program that were imposed by last year's budget.

AB 964 (Gomez), pending in the Assembly Natural Resources Committee, creates the California Affordable Clean Vehicle Program to assist low-income or high risk individuals in the purchase of low-emission vehicles.

AB 1081 (Burke), pending in the Assembly Utilities and Energy Committee, exempts from states sales tax the value of a vehicle traded in to purchase a clean vehicle.

AB 1083 (Burke), pending in the Assembly Water, Parks and Wildlife Committee, requires electrical corporations to create a charging network at all state parks and beaches by July 31, 2018. Electricity would be provided at time-of-use rates.

AB 1259 (Calderon), pending in the Assembly Natural Resources Committee, establishes the Capital Access Loan Program within the Treasurer's California Pollution Control Financing Authority for low- and middle-income families.

AB 1341 (Calderon), pending in the Assembly Revenue and Taxation Committee, excludes up to \$40,000 from state sales tax on the purchase of used near-zero emission or zero-emission vehicles if purchased by a low-income purchaser.

REGISTERED SUPPORT / OPPOSITION:

Support

American Lung Association of California
Association of Global Automakers
Boys & Girls Club of Greater San Diego
California Electric Transportation Coalition
California Greenworks
California State Association of Electrical Workers
California State Pipe Trades Council
Classroom of the Future Foundation
Charge Ahead California Campaign
Coalition of California Utility Employees
Ford Motor Company
Metropolitan Area Advisory Committee
San Diego Gas & Electric
Southern California Edison
Western States Council of Sheet Metal Workers

Opposition

The Utility Reform Network (unless amended)

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