

Date of Hearing: April 8, 2019

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair

AB 1424 (Berman) – As Amended April 1, 2019

SUBJECT: Electric Vehicle Charging Stations Open Access Act

SUMMARY: Requires the provider of an electric vehicle (EV) charging station to offer as form of payment a toll-free telephone number to process a credit card and at least two other specified options of payment; prohibits any state agency from requiring a credit card payment to be through a physical credit card or magstripe reader on EV service equipment, and makes other related changes.

Specifically, **this bill:**

- 1) Requires the provider of an EV charging station to offer as form of payment a toll-free telephone number to process a credit card and at least two of the following options:
 - a) RFID (Radio Frequency Identifier) card payment
 - b) Near field communication or other mobile technology payment
 - c) Vehicle telematics payment
 - d) Onsite capacity for credit card payment
- 2) Prohibits a state agency from requiring a credit card payment to be through a physical credit card or magstripe reader on EV service equipment.
- 3) Requires the total charges for the use of the EV charging station, including any additional network roaming charges for nonmembers, be disclosed to the public at the point of sale pursuant to the rules established by the Division of Measurement Standards in the Department of Food and Agriculture.
- 4) Revises California Air Resources Board's (ARB's) authority to adopt interoperability billing standards for network roaming payments methods for EV charging stations by authorizing ARB to instead adopt interoperability roaming standards and delays until January 1, 2023, that authorization.
- 5) Replaces "interoperability billing standards" with "interoperability roaming standards."
- 6) Defines "interoperability roaming standards" as the ability for a member of one electric charging station network to receive charging services from another electric charging station network.
- 7) Defines "Onsite capacity for credit card payment" as any payment taken from a credit card, through contactless credit card or processed through a chip or magstripe credit card reader.
- 8) Makes various findings and declarations regarding EV charging stations, the financial technology market and multiple secure innovative payment technologies available for the use of EV charging stations.

EXISTING LAW:

- 1) Prohibits the provider of an EV charging station which requires payment of a fee from requiring a user to pay a subscription fee or obtain membership in order to use the station.
- 2) Requires the total charges for the use of the electric charging station, including any additional network roaming charges for nonmembers, be disclosed to the public as the point of sale.
- 3) Requires the provider of an EV charging station to accept payment via credit card or via mobile technology or both.
- 4) Requires the provider of EV service equipment at an EV charging station to disclose to the National Renewable Energy Laboratory the station's geographic location, a schedule of fees, accepted methods of payment, and the amount of network roaming fees charges for nonmembers.
- 5) Authorizes the provider to label charging stations in accordance with federal regulations and, where commercially reasonable and feasible, clearly mark the way to the station with appropriate directional signage.
- 6) Authorizes ARB to adopt interoperability billing standards for network roaming payment methods for EV charging stations, if no interoperability billing standards are developed by a national standards organization by January 1, 2015. If the ARB adopts such standards, all EV charging stations which require payment must meet those standards within one year. Requires any standards adopted by ARB consider other governmental or industry-developed interoperability billing standards, and allows ARB to adopt interoperability billing standards promulgated by an outside authoritative body.
- 7) Defines "interoperability billing standards" as the ability for a member of one electric charging station billing network to use another billing network
- 8) Defines "EV charging station" as one or more publicly available parking spaces served by EV service equipment.
- 9) Defines "EV service equipment" as an electric component assembly or cluster of component assemblies designed specifically to charge batteries within EVs by permitting the transfer of electric energy to a battery or other storage device in an EV.
- 10) Establishes the Charge Ahead California Initiative pursuant to SB 1275 (de León), Chapter 530, Statutes of 2014, that, among other things, includes the goal of placing at least one million zero-emission vehicles (ZEVs) and near-zero emission vehicles (NZEVs) into service by January 1, 2023, and increasing access to these vehicles for disadvantaged, low-income, and moderate-income communities and consumers.

FISCAL EFFECT: Unknown.

COMMENTS: To reduce mobile source pollution and meet our climate goals, the state is reducing its reliance on fossil fuels and promoting efforts to electrify our transportation sector through the advancement of plug-in EVs and plug-in hybrid EVs. Plug-in EVs that run solely on batteries and rely solely on EV charging stations are considered ZEVs because they result in zero tailpipe emissions.

California has looked to expand the sale and use of ZEVs. In 2012, Governor Brown issued EO B-16-2012, which established the milestone of placing 1.5 million ZEVs on California roadways by 2025. As a result of the 2012 order an interagency working group was established with oversight by the Governor's Office of Planning and Research (OPR) which released the "2013 ZEV Action Plan." As it relates to this bill, the plan, among other things, called for the development of interoperability standards for EV charging stations that allow all drivers to charge at a station regardless of membership in a vehicle charging network. Further, last year, Governor Brown announced a new goal and issued B-48-2018 which orders the deployment of 5 million ZEVs on California roads by 2030. The 2018 EO also directed all state entities to spur the construction and installation of 250,000 ZEV charging and fueling infrastructure, find ways to streamline ZEV infrastructure installation processes, and carry out additional programs and actions to reach the goal. According to the California Energy Commission, as December 2018, there are almost 18,000 public chargers (level 2 and direct current (DC) "fast" chargers) installed in California, of which 15 percent are DC "fast" chargers.

In order to electrify our transportation sector and increase consumer confidence to buy EVs, the state through various state agencies has funded and overseen various EV infrastructure efforts. Administered largely by ARB, the 2016 Volkswagen settlement requires \$800 million to be spent in mostly EV fueling infrastructure in California for the coming decade. As part of the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP), CEC spends roughly \$40 million annually for EV infrastructure. Additionally, the California budget for 2018-19 provides the ARFVTP up to \$122.7 million to accelerate the development of ZEV infrastructure. The California Public Utilities Commission (CPUC) continues approving investor-owned utility (IOU) investments in electric vehicle infrastructure. In January 2018, the CPUC approved 15 priority review projects totaling \$42 million, and in May 2018 CPUC approved four standard review projects totaling about \$738 million.

As significant investments are made and as the market for plug-in EVs develops, there are a handful of different companies which are installing charging stations throughout the state each with different costs and membership requirements/access systems. The stations tend to be hosted in parking lots, retail centers and transportation hubs. Today EV service equipment providers offer several access systems including the ability to pay via mobile application, calling a 1-800 number, through a RFID card, vehicle telematics, and/or other forms of contactless payment (most of which are connected to an account/membership and/or require a driver to own a credit card). The multitude of options and lack of consistency can make charging stations less accessible and more difficult to use.

In response to the 2013 ZEV Action Plan, to encourage demand, confidence and accessibility for EVs, Governor Brown signed the Electric Vehicle Charging Stations Open Access Act (SB 454 (Corbett), Chapter 418, Statutes of 2013) into law. The intent of SB 454 was to ensure that plug-in EV owners can charge their plug-in EV at any public charging station regardless of whether they are a member or a subscriber to a particular company, and further provide access standards for these stations. SB 454 authorizes ARB to adopt interoperability billing standards for EV service equipment if no interoperability billing standards are developed by a national standards organization by January 1,

2015. Interoperable billing standards allow the various EV service equipment networks to communicate so that consumers can seamlessly pay to charge at any EV charging station regardless of the owner. According to ARB, there are no national interoperable billing standards to date. Additionally, SB 454 required a provider of an EV charging station that requires payment of a fee to “allow a person desiring to use the station to pay via credit card *or* mobile technology, *or* both.”

In response to SB 454, ARB staff is currently *proposing* draft regulatory requirements. The proposed draft regulation establishes various requirements for publicly accessible EV service equipment, most germane to this bill, are the following: 1.) Chargers must be accessible to drivers regardless of membership in an EV service provider’s network; 2.) EV service providers must operate credit card readers and mobile payment options on Level 2 and DC fast chargers EV service equipment, allowing payment by members and non-members; 3) EV service providers must post all fees associated with a charging session; and 4.) The interoperable billing standard Open Charge Point Interface (OCPI) must be installed on each EV service equipment. ARB has publically noticed a webinar for April 2nd to share with stakeholder’s final considerations of the proposed regulation and ARB staff is scheduled to present the regulatory proposal to the Board at the June board hearing.

ARB is proposing to require all EV service providers to install credit card readers on existing and future EV service equipment. They reason because credit card and debit payments are consumers’ preferred choice for daily purchases at gas stations, supermarkets and discounts stores, that this common transaction will be something that new plug-in EV drivers will most likely be familiar with as they learn how to use charging stations. They further reason that credit card readers are important because charging session initiation by a smartphone application is not accessible for all drivers. According to data used by ARB, “nearly all California residents (92%) have a cell phone, and 58% have a smartphone. A majority of California residents (56%) access the internet or email by cell phone. However, this usage is associated with higher income and younger population segments.” They assert that if the state wants a broader segment of the population (for example, lower-income, the elderly, etc) to drive plug-in EVs that a smartphone application or internet-based payment mechanisms may not be convenient or available.

Per ARB’s proposed regulation, EV service providers will have to install and operate, at a minimum, the interoperable billing standard OCPI. According to ARB, “the OCPI standard will create the foundation for EV service providers to have market certainty in standards, allowing EV service providers to make roaming agreements. Roaming agreements will allow consumers to use a membership with one EV service provider at another EV service provider charger location if an agreement is in place. Consumers would not have to take the time to sign up for memberships with each EVSP, while benefitting from a membership with one or more EV service providers.” ARB believes that offering a credit card reader payment option, adopting interoperability standards, along with the other proposed draft regulations, will ultimately provide more accessibility, allow for a more consistent fueling experience, promote new EV adoption by creating confidence in a standard payment option, and ultimately increase EV miles traveled and reduce emissions. However, this proposed regulation, if adopted will require EV service providers *to* completely replace or retrofit existing EV service equipment. According to ARB’s prepared Standardized Regulatory Impact Assessment, the estimated total cost of the proposed regulation is \$115.2 million over a 10 year period, with annual costs ranging from \$1.1 million to \$16.8 million.

The author has introduced this bill out of concerns to the proposed draft ARB regulations and outright prohibit any state agency from requiring a credit card or magstripe reader on EV service equipment. The authors states, “While well-intentioned, the proposed ARB regulation would result in unintended

consequences that are detrimental to the state's EV charging infrastructure goals. Specifically, the regulation would require the nearly 20,000 existing public charging stations to be retrofitted and replaced at a cost of nearly \$120 million, and at least double the cost of future charging stations. This means millions of dollars invested in public EV charging infrastructure by agencies such as CEC will have been in vain, and future investments by entities including IOUs will only go half as far. The consequences of this regulation will undercut the amount of infrastructure the state can deploy to the detriment of the state's transportation electrification goals. AB 1424 proposes an alternative solution that would preserve uniform access to all EV charging stations and provide consumers with multiple payment options including RFID card payment, mobile technology payment, and credit card payment, among others."

The sponsor of this bill, the Electric Vehicle Charging Association, writes in support, "ARB plans to mandate all existing and future publicly available EV charging stations to be outfitted with credit card readers, despite state law allowing station providers to offer other payment technologies instead. This regulation will have detrimental impacts to the EV charging station, undermining California's EV, EV charging station deployment, and greenhouse gas emission reduction goals. AB 1424 ensures EV service providers continue to innovate and provide a consumer-friendly charging experience."

In opposition, Plug In America writes, "AB 1424 is ill-conceived from both a policy and process standpoint. As one of the original supporters of SB 454, Plug In America's goal was to make charging an EV as simple for a consumer as filling your tank with gasoline...AB1424 as proposed would represent a significant backsliding for consumers. It disproportionately impacts disadvantaged communities by allowing EV charging companies not to have to put credit/debit/prepaid card readers on their EV chargers. This is the antithesis of the previous intent of the legislature and makes the charging experience more difficult for consumers, reducing market acceptance of these critical vehicles.... In addition, ARB allowed a significant amount of time to pass for the EV charging industry to self-regulate which was unsuccessful...The proposed legislation is trying to end run the regulatory process in an inappropriate way."

Committee comments: This bill may be premature as ARB is currently proposing draft regulation on the matter and a final vote on the regulation may be taken before the legislation would take effect. The author has expressed interest to work with stakeholders and ARB to address the concerns highlighted in this bill. While the author's office has already amended his bill, per the committee's request, to add at least one standard form of payment—a toll-free telephone number payment option—the committee realizes that this too may be too challenging, cumbersome and time consuming for existing EV drivers, and may discourage more drivers to be EV consumers. *For this reason, the committee suggests that the author continue working with all stakeholders throughout the regulatory and legislative process on available access/payment options.*

Additionally, this bill delays ARB's existing authority to adopt and require interoperability standards. It should be noted that the EV service provider community had several years to adopt this standard and failed to do so. Absent interoperability standards, EV drivers may be forced to hold various EV service equipment "memberships" (i.e. download different mobile apps or acquire different RFID cards) and or default to the toll-free telephone number option provided in this bill. To ensure interoperability standards are adopted and to allow the industry more time to adopt what they deem is the most appropriate standard, the author has amended this bill to give the industry until 2023 to come up with an interoperability standard and clarify the definition of these standards.

Previous Legislation: SB 454 (Corbett), Chapter 418, Statutes of 2013, established the EV Charging Stations Open Access Act which among other things, prohibited the provider of an EV 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 EV charging station, including any network roaming charges, be disclosed at the point of sale; required that an EV charging station accept payment by credit card or mobile technology, or both; and authorized ARB to adopt interoperability billing standards for network roaming payment methods for EV charging stations.

REGISTERED SUPPORT / OPPOSITION:

Support

Clippercreek
Electric Vehicle Charging Association
Silicon Valley Leadership Group

Opposition

Electric Auto Association
Plug In America
Siemens Corporation
Sierra Club of California
Tritum
Union of Concerned Scientists

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