Why Plug In America Supports ARB’s Proposed Electric Vehicle Supply Equipment (EVSE) Standards

We’re a non-profit advocating for hundreds of thousands of EV consumers.

1) Consumers need **true** Open Access to EV Charging
   - Similar or better than how they refuel their cars today
   - Can you imagine pulling into a gas station and not knowing how much you’ll pay for the fuel, if it will take your credit or debit card, or having to download an app, call an 800 number, or join a club before you pump? This regulation is a way to address these consumer needs
   - Card readers (Credit, Debit, Prepaid) are the most basic way to solve the issue of never leaving any driver stranded at a public charger
   - Relative to driver access to charging, we need to avoid future technologies that are not yet available - including contactless credit cards and vehicle telematics charging.
   - **Disadvantaged communities** buying new or used EVs are **disproportionately impacted** where their public charging access is critical - 25% of the consumers are unbanked or underbanked, and 23% of Californians don’t have smart phone and more who can’t get a signal
   - A simple set of fair regulations will **strengthen and increase** the size of the market by giving drivers the certainty of **actual open access**, especially as the number of vehicles grows at an accelerating pace

2) Special interests are using **scare tactics**. The regulation’s opponents want you to believe that the costs to add card readers will place an extreme burden on them and previous installations will be ripped out, but these numbers have been inflated out of proportion and the actual costs according to the legislative analysis may be as low as $10M. Taxpayers have **already** paid $106 million to these same charging companies to support public EV infrastructure. **Isn’t** it reasonable to ask them to provide access to every driver? They have **also introduced AB1424 to override the regulation**.

3) We believe that the Board should accept the staff proposal with one key addition, set definitive dates for retrofit or replacement of Level 2 and DCFC EVSE and prioritize Level 2 and DCFC EVSE in Disadvantaged Communities, with replacement dates of July 1, 2023 and July 1, 2021 respectively.

Let’s give the public confidence to purchase and drive these amazing EVs. That will enable the rapid expansion of a fair market for public EV charging.

June 2019
April 5, 2019

Dr. Richard Corey
Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814


Dear Dr. Corey,

The coalition of undersigned organizations writes to propose additional amendments to the proposed regulation above, based on the version published on the ARB website on March 25, 2019 and presented at the ARB webinar on April 2, 2019. Our goal is to ensure appropriate consumer protections while striking a balance of cost and implementation considerations for Electric Vehicle Supply Equipment (EVSE) deployment.

**Principles**

Our proposed amendments are based on three core principles:

1. To ensure open and universal access to publicly available charging stations, especially given many of them were deployed with public funding from the State and Federal Governments.
2. To ensure that such open access takes into consideration the needs of Disadvantaged Communities (DAC), many of whom do not possess smart phones, credit cards, or bank accounts.
3. To protect the existing investment California has made so far in building a public EV charging infrastructure.

**Proposed Amendments**

We present the following high-level amendments and look forward to discussing with you the detailed language that would be implemented in the actual regulation:

1. Retain the retrofit requirement for credit/debit/prepaid EMV card readers on publicly available Level 2 and DCFC chargers for Disadvantaged Communities (DAC).
2. Eliminate the retrofit requirement for card readers on publicly available Level 2 chargers installed prior to some effective date for the new regulations, perhaps January 1, 2022.

3. For Level 2 chargers that are not retrofitted, add a requirement that a toll-free number be available, prominently posted or displayed on the chargers, to allow for payment over the phone via a toll-free number using a credit, debit or pre-paid card. Such requirement could take effect on January 1, 2020.

4. Amend the definition of “publicly available” in the regulation to more closely align with the statutory language, clarifying that workplace and multi-unit dwelling charging stations that are operated for employees, visitors, and MUD residents at least a majority of the time are not “publicly available,” unless they have been “designated by a property owner or lessee to be available to, and accessible by, the public.”

We appreciate your consideration of our recommendations as you further refine the proposed regulation.

Please contact Jay Friedland, Senior Policy Advisor, Plug In America at 831-818-3510 for additional questions or information.

Sincerely,

Raejean M. Fellows  
President  
Electric Auto Association

Matthew Nelson  
Director, Government Affairs  
Electrify America

Thomas Ashley  
Vice-President, Policy  
Greenlots

Joel Levin  
Executive Director  
Plug In America

Chris King  
Chief Policy Officer  
Siemens Digital Grid

Jeff Wolfe  
President  
Tritium

cc: Mr. Steve Cliff, California Air Resources Board  
Ms. Analisa Bevan, California Air Resources Board  
Mr. Joshua Cunningham, California Air Resources Board  
Ms. Elise Keddie, California Air Resources Board  
Ms. Stephanie Palmer, California Air Resources Board
May 7, 2019

Assembly Member Marc Berman
State Capitol, Room 6011
Sacramento, CA 95814

RE:  AB 1424 (Berman) Electric Vehicle Charging Stations Open Access Act – OPPOSE

Dear Assembly Member Berman,

On behalf of the steering committee members of the Charge Ahead California Campaign (Coalition for Clean Air, Communities for a Better Environment, Environment California, The Greenlining Institute, and the Natural Resources Defense Council), we write to regretfully express our opposition to your bill, AB 1424, which would undermine the authority of the Air Resources Board (ARB) to ensure more reliable and equitable payment access for all electric vehicle drivers.

It is estimated that nearly twice as many Californians die from dirty air due to traffic pollution as from motor vehicle accidents. Analysis conducted by the Air Resources Board, the South Coast Air Quality Management District, and the San Joaquin Valley Air Pollution Control District demonstrates there is no alternative to the widespread use of electricity as a transportation fuel if California is to comply with the federal air quality standards. Likewise, reducing emissions of greenhouse gases as required by Senate Bill 32 will require the mass adoption of vehicles powered by renewable electricity.

1 5,726 annual premature deaths in California due to PM 2.5 and 209 from ozone (Fabio Caiazzo et al., Air pollution and early deaths in the United States, Atmospheric Environment, 2013) compared to 3,081 traffic fatalities (Selected Detail Within Leading Causes Of Death By Sex And Race/Ethnic, California Department of Public Health.)
To meet the goals of the Charge Ahead California Initiative (SB 1275, De León) of creating a mainstream market for electric vehicles and increasing access to those vehicles for low- and moderate-income households and for residents in disadvantaged communities, customers need reliable access to electricity as a transportation fuel where they live, work and play. However, in our view, AB 1424 would undermine reliable access by prohibiting any state agency from requiring charging stations to accept credit card payment in the forms that would most align with customer expectation and open access. Customers should be able to pay for charging at these stations with a credit card, just as they would expect to be able to at gas stations or parking meters. While we understand the eagerness to move to the “payment forms of the future,” it is imperative that charging stations deployed today are aligned with the payment forms of the present and that California does not leave any drivers behind in prematurely racing towards the future.

AB 1424 would also undermine an ongoing public regulatory process underway at ARB under the authority granted to it by SB 454 (Corbett, 2013) and would make charging less accessible and less equitable, countering the goals codified by the Charge Ahead California Initiative.

If the bill sponsors, the author, and ARB are able to reach a compromise on the regulations and the bill language, we are happy to reevaluate our position. But at this time, we believe these issues are best worked out through the regulatory process.

Respectfully submitted,

Max Baumhefner
Natural Resources Defense Council

Bahram Fazeli
Communities for a Better Environment

Alvaro Sanchez
The Greenlining Institute

Dan Jacobson
Environment California

Bill Magavern
Coalition for Clean Air
AB 1424
MYTHS VS FACTS

1. MYTH: AB 1424 will enhance existing law SB454 Electric Vehicle Charging Stations Open Access Act.
   FACT: AB 1424 is a wolf in sheep’s clothing that will overturn proposed regulations based on SB454 that create universal open payment access. AB1424 is actually a Closed Access Act.

2. MYTH: AB 1424 will provide additional payment options to the EV driver.
   FACT: It will not add any new payment options. Instead it will perpetuate a system of closed, proprietary payment technologies currently in use at public EV charging stations. A substantial portion of these stations was installed using public funds and the owners should be obligated to accommodate the public with open access payment.

3. MYTH: AB 1424 allows the EV driver to decide the payment methods from a pre-determined list that will be available to the EV driver.
   FACT: AB 1424 perpetuates the current system where the charging provider determines the payment method. Selection of payment mode should be the consumer’s choice, NOT the charging provider. Shell or Chevron do not dictate how consumers can pay at their stations to fill gas, or require that they download an app, provide their private data or call a 1-800 number. Why should EV drivers have to do so to “fuel”?

4. MYTH: AB 1424 states that mobile and contactless payment methodologies are more secure than physical credit cards and provides improved reliability and enhanced security for consumers.
   FACT: EMV chip cards are the most secure mode of payment according to Mastercard. Introduction of EMV chip cards into the US market has reduced card fraud by 75% (Mastercard), 80% (Visa) since 2015, while online fraud has increased by 40%. The EMV chip card has become the standard in the U.S.

5. MYTH: AB1424 states that California should ensure that the most innovative, up-to-date and secure technologies be used for electric vehicle infrastructure.
   FACT: If credit cards were an old and insecure technology, why would the most innovative company in the world, Apple, launch a physical credit card (Apple Card) in March 2019?

6. MYTH: AB1424 fact sheet contends that it will cost $120 million to retrofit chargers to provide universal access.
   FACT: This was the high end of CARB’s range based on 2015 data. It would be more accurate to use 2018 data that is available. The Assembly Appropriations Committee estimated that to be between $10 million and $40 million. It will be much less since the compliance time has been pushed to July 2023, when many of these chargers will be reaching end-of-life.

7. MYTH: AB 1424 states that Europe is mandating that all point-of-sale line terminals be contactless-enabled by 2020.
   FACT: The European Union has no such policy mandate in place.
May 17, 2019

The Honorable Marc Berman  
California State Assembly  
Position: Oppose

State Capitol Building  
Sacramento, CA 95814  
Location: Assembly Floor

Re: AB 1424 (Berman) Electric Vehicle Charging Stations Open Access Act (As Amended April 1, 2019)

Dear Assemblmemeber Berman:

Plug In America is the leading national consumer voice promoting the use of plug-in electric vehicles in the United States to consumers, policymakers, auto manufacturers and others. Formed as a non-profit in 2008, Plug In America provides practical, objective information collected from our coalition of plug-in vehicle drivers, through public outreach and education, policy work and a range of technical advisory services. Our expertise represents the world’s deepest pool of experience of driving and living with plug-in vehicles. The organization conceived National Drive Electric Week and has advanced workplace charging by pioneering ride-and-drive events at such leading corporations as Google, Mattel and Paramount Pictures. We drive electric. You can too. www.pluginamerica.org

Plug In America works to accelerate the shift to plug-in vehicles powered by clean, affordable, domestic electricity to reduce our nation’s dependence on petroleum and improve the global environment. As the organization representing the more than five hundred thousand California EV drivers and millions of potential future consumers of plug-in hybrids and fully electric vehicles, we oppose AB 1424, legislation that would allow charging companies not to put card readers on their chargers.

AB 1424 (Berman) is ill-conceived from both a policy and process standpoint. As one of the original supporters of SB 454 (2013), Plug In America’s goal was to make charging an EV as simple for a consumer as filling your tank with gasoline. Can you imagine pulling up at a gas station and finding out you can’t use your credit card, have to download an app, call an 800 number, or be a member of some club or network, and on top of all of that not know what price you are paying for fuel? And that is assuming that one has cell coverage, which is intermittent and spotty outside of the urban areas. In fact, there are locations within the urban San Francisco Bay Area that suffer from poor connectivity and access. It is also prudent to point out that 23% of California residents do not own a smart phone; and among those who do, some may not be able to afford mobile data plans.

AB1424 as proposed would represent a significant backsliding for consumers. It disproportionally 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. According to the FDIC, 25% of all of California households are either unbanked or underbanked. In minority and disadvantaged communities this number rises to 50%.¹ This

issue is so critical that many jurisdictions are now banning so called “cash-less” stores. The City of
Philadelphia just passed legislation, and New York, Chicago, and San Francisco are close behind. The
State of Massachusetts has also banned cash-less stores and legislation has passed and is on the
governor’s desk in New Jersey.

We are just reaching the point where used EVs are becoming affordable for this population and the
state is making considerable investments to help make this happen. AB1424 would adversely impact
these communities as they will likely have to rely on public charging to meet their EV fueling needs.
Prepaid cards widely available at grocery and convenience stores can help mitigate this issue with 26.9% of unbanked households using them for a variety of purchases.\(^2\) This is why Plug In America believes that
card readers on EV chargers are a reasonable compromise for drivers.

In addition, ARB allowed a significant amount of time to pass for the EV charging industry to self-
regulate which was unsuccessful. ARB has been holding an open process on the regulation with multiple
public workshops. There is another public workshop on April 2nd and the Board vote is expected at the
end of June. Certain stakeholders who have participated in the process are unhappy with the proposed
outcome and have indicated they might sue to stop it. These are the sponsors of this legislation. The
proposed legislation is trying to end run this well thought out regulatory process in an inappropriate way
and AB1424 should be withdrawn from consideration at this time.

AB 1424 as proposed would represent a significant backsliding for consumers, reducing market
acceptance of these critical vehicles. We urge the Assembly Transportation Committee to reject AB1424
and allow ARB’s process to continue to create rational regulations in this critical area.

Please contact our legislative advocate, Kathryn Lynch, at (916) 443-0202 or lynch@lynchlobby.com with
any questions.

Sincerely,

Joel Levin
Executive Director
Plug In America

cc: Ms. Ronda Paschal, Deputy Legislative Secretary, Governor’s Office
    Ms. Cynthia Alvarez, Consultant, Assembly Transportation Committee
    Mr. Daniel Ballon, Consultant, Assembly Republican Caucus
    Ms. Kathryn Lynch, Legislative Advocate
    Plug In America

\(^2\) Federal Deposit Insurance Corporation, The 2017 National Survey of Unbanked and Underbanked
Households, [https://economicinclusion.gov/surveys/2017household/prepaid-cards-findings/](https://economicinclusion.gov/surveys/2017household/prepaid-cards-findings/)
May 17, 2019

The Honorable Marc Berman
California State Assembly
State Capitol Building
Sacramento, CA 95814

Position: Oppose
Location: Assembly Floor

Re: AB 1424 (Berman) Electric Vehicle Charging Stations Open Access Act (As Amended April 1, 2019)

Dear Assemblymember Berman:

We the undersigned are writing to oppose AB 1424, legislation that would allow charging companies not to put card readers on their chargers. AB 1424 (Berman) guts SB 454 (2013) and kills a nearly completed California Air Resources Board (CARB) regulatory process. It disproportionally impacts disadvantaged communities by allowing charging companies not to have to put credit/debit/prepaid card readers on their chargers. This is the antithesis of the previous intent of the legislature and makes the charging experience more difficult for consumers. In addition, it stops CARB from regulating in the middle of a regulation process.

CARB allowed a significant amount of time to pass for the EV charging industry to self-regulate which was unsuccessful. CARB has been holding an open process on the regulation with multiple public workshops. There is another workshop on April 2nd, and the Board vote is expected at the end of June. Certain stakeholders who have participated in the process are unhappy with the proposed outcome and have indicated they might sue to stop it. These are the sponsors of this legislation. The proposed legislation is trying to end run this well thought out regulatory process in an inappropriate way, and AB 1424 should be withdrawn from consideration at this time.

The legislation is also poor public policy. The original goal was to make charging an EV as simple for a consumer as filling your tank with gasoline. Can you imagine pulling up at a gas station and finding out you can’t use your credit card, have to download an app, call an 800 number, or be a member of some club or network, and on top of all of that not know what price you are paying for fuel? And that is assuming that one has cell coverage, which is intermittent and
spotty outside of the urban areas. In fact, there are locations within the urban San Francisco Bay Area that suffer from poor connectivity and access. It would also be prudent to point out that 23% of California residents do not own a smartphone, and among those who do, some may not be able to afford mobile data plans.

AB 1424 as proposed would represent a significant backsliding for consumers, reducing market acceptance of these critical vehicles.

Sincerely,

Raejean M. Fellows
President
Electric Auto Association

Joel Levin
Executive Director
Plug In America

Chris King
Chief Policy Officer
Siemens Digital Grid

Katherine Garcia
Policy Advocate
Sierra Club California

Jeff Wolfe
President
Tritium

Jason Barbose
Western States Policy Manager
Union of Concerned Scientists

cc: Ms. Ronda Paschal, Deputy Legislative Secretary, Governor’s Office
    Ms. Cynthia Alvarez, Consultant, Assembly Transportation Committee
    Mr. Daniel Ballon, Consultant, Assembly Republican Caucus
An act to amend Sections 44268 and 44268.2 of the Health and Safety Code, relating to public resources.

LEGISLATIVE COUNSEL'S DIGEST


The Electric Vehicle Charging Stations Open Access Act prohibits the charging of a subscription fee on persons desiring to use an electric vehicle charging station, as defined, and prohibits a requirement for requiring those persons to obtain membership in any club, association, or organization as a condition of using the station, except as specified. The act requires an electric vehicle charging station to provide to the general public 2 specified options for payment. The act also authorizes the State Air Resources Board, if no interoperability billing standards have been adopted by a national standards organization by January 1, 2015, to adopt interoperability billing standards, as defined, for network roaming payment methods for electric vehicle charging stations, and requires, if the state board adopts standards, all electric vehicle charging stations that require payment to meet those standards within one year.

This bill instead would require an electric vehicle charging station to provide to the general public a minimum of 2 out of a list of 4 specified
The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) As of 2017, the state has over 8,000 gasoline fueling stations. To support the state’s goal of 1,500,000 zero-emission vehicles by 2025, the state will need 250,000 electric vehicle charging stations. That number will need to increase significantly to effectively support the state’s goal of 5,000,000 zero-emission vehicles by 2030.

(b) The financial technology market is quickly evolving to meet the needs of consumers and provide them with payment systems and financial tools that are secure, reliable, and cost effective.

(c) Mobile and contactless payment methodologies are secure, innovative payment technologies that provide improved reliability and enhanced security for consumers. In the United States, major financial companies, including Chase, Capital One, and Visa, already offer or will offer contactless forms of payment by the end of 2019. In other countries, contactless payment methods are common practice. Europe is mandating that all point-of-sale terminals be contactless-enabled by 2020.

(d) Like any business, electric vehicle service providers have an obligation to protect consumers’ information with secure payment technologies. Many electric vehicle service providers offer multiple secure innovative payment technologies for the use options for payment, in addition to a toll-free telephone number for processing a credit card payment. The bill would prohibit a state agency from requiring a credit card payment, as defined, to be through a physical credit card or magstripe reader on electric vehicle service equipment. The bill would remove revise the provision authorizing the state board to adopt interoperability billing standards for network roaming payment methods for electric vehicle charging stations, and requiring, if the state board adopts standards, all electric vehicle charging stations that require payment to meet those standards within one year. stations by authorizing the state board to instead adopt interoperability roaming standards and delaying that authorization until January 1, 2023.

of their stations, including mobile applications, radio frequency identification (RFID) cards, contactless cards, and vehicle telematics. In Canada and Europe, electric vehicle drivers predominantly use mobile payment technologies or contactless cards to access charging stations.

(e) In light of the forthcoming demand for electric vehicle charging stations in the near future, it is imperative that the state ensure that the most up-to-date and secure technologies are used for electric vehicle infrastructure.

SEC. 2. Section 44268 of the Health and Safety Code is amended to read:

44268. As used in this chapter, the following terms have the following meanings:

(a) “Battery” means an electrochemical energy storage system powered directly by electrical current.

(b) “Credit card payment” means any payment taken from a credit card, including, but not limited to, payment through a third party mobile application linked to a credit card, through contactless credit cards, and processed through a chip or magstripe credit card reader.

(c) “Electric vehicle” means a vehicle that uses a plug-in battery to provide all or part of the motive power of the vehicle, including battery electric, plug-in hybrid electric, or plug-in fuel cell vehicle.

(d) “Electric vehicle charging station” means one or more publicly available parking spaces served by electric vehicle service equipment.

(e) “Electric vehicle service equipment” means an electric 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 electric vehicle.

(f) “Interoperability roaming standards” means the ability for a member of one electric charging station network to receive charging services from another electric charging station network.

(g) “Network roaming” means the act of a member of one electric vehicle charging station billing network using a charging
station that is outside of the member’s billing network with the member’s billing network account information.

(g) “Onsite capacity for credit card payment” means any payment taken from a credit card through a contactless credit card or processed through a chip or magstripe credit card reader.

(h) “Publicly available parking space” means a parking space that has been designated by a property owner or lessee to be available to, and accessible by, the public and may include on-street parking spaces and parking spaces in surface lots or parking garages. “Publicly available parking space” shall not include a parking space that is part of, or associated with, a private residence, a parking space that is reserved for the exclusive use of an individual driver or vehicle or for a group of drivers or vehicles, such as employees, tenants, visitors, residents of a common interest development, or residents of an adjacent building, or a parking space provided by a producer of electric vehicles as a service. Nothing in this article limits the ability of an owner or lessee of a publicly available parking space whose primary business is other than electric vehicle charging from restricting use of the parking space, such as limiting use to customers and visitors of the business.

SEC. 3. Section 44268.2 of the Health and Safety Code is amended to read:

44268.2. (a) (1) Persons desiring to use an electric vehicle charging station that requires payment of a fee shall not be required to pay a subscription fee to use the station, and shall not be required to obtain membership in any club, association, or organization as a condition of using the station. The total actual charges for the use of an electric vehicle charging station, including any additional network roaming charges for nonmembers, shall 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. An electric vehicle charging station that requires payment of a fee shall allow a person desiring to use the station to pay via a toll-free telephone number to process a credit card payment and at least two of the following:

(A) RFID card payment.

(B) Near field communication or other mobile technology payment.
(C) Vehicle telematics payment.

(D) Onsite capacity for credit card payment.

(2) Notwithstanding paragraph (1), an electric vehicle charging station may offer services on a subscription- or membership-only basis provided those electric vehicle charging stations allow nonsubscribers or nonmembers the ability to use the electric vehicle charging station through the payment options detailed in paragraph (1).

(3) A state agency shall not require a credit card payment to be through a physical credit card or magstripe reader on electric vehicle service equipment.

(b) The service provider of electric vehicle service equipment at an electric vehicle charging station or its designee shall disclose to the National Renewable Energy Laboratory the electric vehicle charging station’s geographic location, a schedule of fees, accepted methods of payment, and the amount of network roaming charges for nonmembers, if any.

(c) Electric vehicle charging stations shall be labeled in accordance with Part 309 of Title 16 of the Code of Federal Regulations, and, where commercially reasonable and feasible, may be clearly marked with appropriate directional signage in the parking area or facility where they are located.

(d) If no interoperability roaming standards have been adopted by an international standards organization by January 1, 2023, the state board may adopt interoperability roaming standards for network roaming payment methods for electric vehicle charging stations. If the state board adopts interoperability roaming standards, all electric vehicle charging stations that require payment shall meet those standards within one year. Any standards adopted by the state board shall consider other governmental or industry-developed interoperability roaming standards and may adopt interoperability roaming standards promulgated by an outside authoritative body.