June 24, 2019

Ms. Elise Keddie
Ms. Stephanie Palmer
Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: EV Charging Station Open Access Act Rulemaking – Comments on Draft Regulatory Language

Dear Ms. Keddie and Ms. Palmer,

We, the undersigned electric vehicle (EV) charging station manufacturers, providers, and operators ("the Parties"), would like to express our gratitude for your efforts to implement the Electric Vehicle Charging Station Open Access Act. Thank you for engaging with our companies over the past year on the specifics of the proposed regulation; these discussions have been important to understanding the intention of the regulation and clarifying the specifics of proposed language. We continue to have significant concerns with the language as proposed. Following feedback provided in July and December 2018, the Parties now respectfully submit supplemental comments following the initiation of the official 45-day comment period.

I. There is no data showing EMV chip readers will increase low-income access to EV charging stations

Page six of the proposed regulation order states that all EVSE subject to the regulation "shall have a credit card reader physically located on the EVSE…[and that] the credit card reader shall accept, at a minimum, Euro Mastercard Visa chip."

EV charging companies have shared data with the Air Resources Board (ARB) showing extremely low utilization rates for credit card readers on chargers that have them, sometimes as little as 1% of transactions. In those instances, consumers have primarily used mobile applications or tap cards to initiate their charging sessions, and in many cases are using the 1-800 number just as much as credit cards.

The Parties have seen no data from Staff suggesting that session usage will increase as EV penetration grows, and in fact, a 2018 report published by the Air Resources Board (ARB) titled, "Overcoming Barriers to Clean Transportation Access for Low-Income Residents", which states "many low-income residents lack credit cards and bank accounts" (p. 26)[1], suggests the opposite. Given ARB's own recognition that credit cards are a barrier for low-income households as referenced in the report, it is clear that a credit card reader mandate would not expand access for low income consumers.

In fact, credit card readers will make charging sessions more expensive given increased costs of adding the credit card readers for electric vehicle service providers (EVSPs). Owners and operators of EV charging stations may not be able to absorb these costs, including in disadvantaged communities, and may need to either shut down the charger or increase the costs of charging. Neither of these options help low-income EV drivers, which will hurt deployment across the state, including in low-income and disadvantaged communities.

II. If a Credit Card Reader Mandate Must Be Proposed by ARB, the Parties Recommend Contactless Credit Cards As Another Option

While the Parties recognize that EMV chip readers are one kind of prevalent payment technology, the payment industry is increasingly shifting toward contactless credit card readers. Not only has American Express, Capital One, and Citi already been using contactless credit cards, but Chase and Wells Fargo have announced that they will roll out contactless credit cards throughout 2019. Chase plans to have all of its credit cards be contactless by summer 2019, with debit cards becoming contactless in the second half of the year. Furthermore, Visa expects 100 million contactless cards to be issued by the end of 2019, and contactless cards will constitute 2/3rds of Mastercard's payment volume in the next two years. Contactless credit cards are prevalent worldwide. The U.S., especially given these recent announcements from Chase and Wells Fargo, is catching up. This mandate as proposed will force charging companies to develop an international product for the California market specifically, thus creating an island in payment standards globally.

Recommendation: The Parties respectfully request that EVSE be allowed to accept credit card payment in the method of the EVSE's choice, whether that be contactless credit card or EMV chip cards. This would provide adequate flexibility to charging station providers to choose a payment technology they prefer without jeopardizing consumer access to charging stations.

[1] Available at: https://ww2.arb.ca.gov/resources/documents/carb-barriers-report-final-guidance-document

Therefore, the regulatory language would read as follows:

(d) All EVSE subject to this section shall have **the ability to receive** a credit card ~~reader~~ **payment** physically ~~located~~ on either the EVSE unit or a kiosk used to service that EVSE. The credit card reader shall comply with all of the following requirements:

(1) The **EVSE** ~~credit card reader~~ shall **employ** ~~accept~~, at a minimum, ~~Euro Mastercard Visa (EMV) chip, and, at a minimum, one of~~ Visa, MasterCard ~~or~~ **and** American Express.

(2) **If the EVSE contains a** ~~The~~ credit card reader, **it** shall be non-locking and shall always permit customers to remove credit cards without damage to the card, including during a fault situation or power failure.

(3) The **complete financial transaction from the credit card reader device through the payment processor chain** shall comply with PCI – DSS Level 1.

III. Existing stations should be subject to a 10-year phase-in to avoid retrofits and replacements so that EVSPs can focus on deploying new charging stations to meet state goals rather than spending capital to retrofit and replace hardware.

Page six of the proposed regulation order states that all publicly available "DCFC EVSEs installed prior to July 1, 2020, shall comply with the requirements of this section by five years from the date of installation, or July 1, 2020 (whichever is later). It also states that "Level 2 EVSEs installed prior to July 1, 2023, shall comply with the requirements of this section by five years from the date of installation, or July 1, 2023 (whichever is later)."

Should ARB mandate EMV chip readers on electric vehicle supply equipment (EVSE), EVSPs will be saddled with a payment technology that is becoming rapidly outdated and obsolete, adding unnecessary costs to charging stations without providing as much customer value as intended. Most charging hardware – both Level 2 and direct current fast chargers (DCFCs) - is not able to be retrofitted with EMV chip readers, meaning that complete replacements of the chargers will instead be necessary.

As mentioned above, EVSPs have designed charging stations with an expected useful life of at least ten years on average. Setting a five-year compliance deadline does not adequately account for this lifespan. This regulation as proposed would lead to prematurely replacing perfectly functional charging stations, as well as forcing EVSPs to conduct costly retrofits or replacements to DCFCs. As a result, critical and limited State dollars, ratepayer funds, and private capital will be diverted toward upgrading existing infrastructure, when it could be used to maximize deployment of additional infrastructure. Executive Order B-48-18 calls for the deployment of 250,000 EV

charging stations, including 10,000 DCFCs by 2025[2]; while we as an industry fully embrace this goal, we recognize its ambition. The State will need to increasingly reduce barriers to EV charging station deployment to fulfill it. This regulation as proposed adds costs to charging infrastructure at a time when the industry needs to rapidly scale-up deployment, and invest in deployments in underserved communities, not focus on retrofitting existing networks.

Additionally, with DCFCs in particular, it often takes more than one year to install a charging station after the site is secured through a sale or contract due to local permitting, utility interconnections, and construction timelines. The California Energy Commission's CALeVIP program Sacramento County Incentive Project for example allows for an 18-month installation from the Funds Reserved date.

If CARB moves forward with the proposed timeline, some site hosts (as owners of most of the affected charging stations) may restrict their charging stations from public access or shut down their chargers completely to avoid the costs of complying with this requirement or the fine associated with keeping a station public without an EMV reader. This is especially true for charging stations that are less than profitable for owners and operators – either site hosts or electric vehicle service providers – which may be in underserved parts of the state and are nonetheless important to have in the field for consumer access.

IV. Create Parity in Timelines with DCFC and Level 2 Chargers by Ensuring Compliance Begins for both Technologies in 2023

Page six of the proposed regulation order states that all publicly available "DCFC EVSEs installed prior to July 1, 2020, shall comply with the requirements of this section by five years from the date of installation, or July 1, 2020 (whichever is later)."

The Parties remain opposed to EMV readers being mandated across all existing and future stations. However, should CARB move forward in its final regulation with this requirement, we respectfully request parity between DCFCs and Level 2 stations for a compliance timeline of 2023. Given new information from EV charging companies facing challenges in implementing retrofits on existing chargers – be it magstripe or EMV chip – the Parties request parity in timelines for DCFC and Level 2 so that EVSPs may have time to develop new product lines specific for California, change manufacturing practices or ensure that their suppliers develop new product lines, and determine the future of sales in the State to respond to CARB's final regulations as voted on in the June meeting. It is insufficient for manufacturers to have only one year from the CARB board vote until July 2020 to create new product lines to meet this regulation. This will lead to an undersupply in the market and lead to a shortage of DCFCs available for deployment.

[2] Available at: https://www.ca.gov/archive/gov39/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/index.html

Recommendation: The Parties respectfully request that DCFC EVSEs installed prior to July 1, **2023** and Level 2 EVSEs installed prior to July 1, 2023 have **ten** years from the date of installation to comply with the regulation.

Therefore, the regulatory language would read as follows: DCFC EVSEs installed prior to July 1, ~~2020~~ **2023**, shall comply with the requirements of this section by ~~five~~ **ten** years from the date of installation, or July 1, 2023 (whichever is later)."

V. Announced Roaming Agreements Will Ensure that Interoperability Concerns Are Addressed, and Roaming Should be Aligned with Global Standard and Peer-to-Peer Agreements Already Announced

Page 8 requires EVSPs to meet the "California Open Charge Point Interface Interim Test Procedures for Networked Electric Vehicle Supply Equipment for Level 2 and Direct Current Fast Charge Classes." Over the past year, EVSPs have announced peer-to-peer roaming agreements based on Open Charge Point Interface ("OCPI"), the global standard under development for roaming. This proposed rule would develop a California-specific version of OCPI, which is unnecessary given the status of the global standard and the status of roaming agreements in the industry. As of June 11, 2019, roaming agreements have been signed or announced across nearly 100% of charging networks in the US, with the majority of the remaining belonging to smaller and non-networked stations – enabling a driver with one account or tap card to access these networks.

Developing, mandating, and testing for California OCPI is an unnecessary administrative cost for ARB. Furthermore, while OCPI is currently the preferred standard for peer-to-peer roaming, it is likely that there will be further development globally as the industry continues to evolve. ARB should seek to support implementation locally of global standards rather than developing their own.

Recommendation: We respectfully request that the requirement for **"California Open Charge Point Interface Interim Test Procedures for Networked Electric Vehicle Supply Equipment for Level 2 and Direct Current Fast Charge Classes"** be implemented starting in 2023. Language should be added to the rulemaking indicating that ARB shall not develop a California-specific protocol and should instead accept industry standard open versions.

VI. Scale Down the Annual EVSE Usage by Payment Type Information Reporting Requirement

Pages 11 and 12 of the proposed regulation order require EVSPs to report annually the following EVSE payment usage information:

- Total number of charging sessions started with a credit card;
- Total number of charging stations started with an NFC;
- Total number of charging sessions started with a toll-free number;
- Total number of charging sessions started with membership RFID card;

- Total number of charging sessions started with service provider application, and;
- Total number of other methods of payment, including sessions that did not require payment.

These requirements as written would imperil sensitive customer and business data and impose extreme administrative burdens and costs on EVSPs to collect and process their data to provide it to ARB in a useable format. There are millions of transactions happening annually at charging stations through various forms of payment. To create, sort, and organize new data fields, as well as store expanded data sets, in the form requested would require a significant increase in operating costs and staffing to process. Many EVSPs are small businesses in start-up phase and cannot afford the costs associated with complying with this data reporting requirement. Doing so would require passing costs on to customers, which would make it more expensive and difficult for EV drivers to charge their vehicles and slow down the industry's deployment of charging stations. Additionally, companies are concerned about confidentiality and having to disclose confidential business information.

Recommendation: The Parties respectfully request that ARB allows for these reporting requirements to be optional, but not required. This will help avoid price impacts to drivers, ease the cost of compliance, and protect sensitive business and customer data.

VII. ARB Should not Preempt DMS Under this Regulation

Section 2360.2 requires for prices to charge in U.S. dollars per kilowatt hour or megajoule to align with DMS regulations. However, the DMS regulations have not been promulgated. Given that the DMS regulations are still pending and EVSPs will be regulated on pricing, metering, and accuracy through that regulation – not through ARB - the Parties believe that this is outside of ARB's jurisdiction, and this section should be struck.

Conclusion

We sincerely appreciate ARB's efforts to help electrify the transportation sector, as it is paramount to achieving California's long-term climate goals. EV charging stations continue to be a critical piece to this overall vision. Please let us know if you have any questions about our comments; we would be happy to discuss our perspectives with you further to help inform this process.

Sincerely,

Abdellah Cherkaoui
Electric Vehicle Charging Association

Anne Smart
ChargePoint

Megha Lakhchaura
EVBox

Sara Rafalson
EVgo

Brad Groters
EV Connect

Marc Monbouquette
eMotorWerks

Travis Allan
Flo

Rajiv Shah
Freewire Technologies

Jennifer Chang
Noodoe

Scott Mercer
Volta