



ChargePoint, Inc.

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September 19, 2019

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

Re: Comments on Modified Text (15-Day Notice) Electric Vehicle Supply Equipment Standards Regulation

Dear Ms. Keddie and Ms. Palmer,

ChargePoint offers the following comments regarding the Air Resources Board's (ARB) proposed modified text for the Electric Vehicle Supply Equipment Standards (SB 454). We greatly appreciate staff's efforts to develop these regulations and the time taken to meet with stakeholders. We hope that our comments help inform the process by providing the perspective of a company that designs, manufactures, and operates a network of electric vehicle (EV) charging stations.

ChargePoint is the world's largest electric vehicle charging network with more than 100,000 Level 2 EV and direct current fast charging spots. ChargePoint's customers include major employers, municipalities, universities, utilities, real estate developers and parking garage facility owners and operators that provide EV charging and related services to EV drivers.

Our comments address 1) applicable definitions, 2) payment method requirements and technology review, and 2) reporting for electric vehicle service providers.

1) § 2360 Applicability

- a. Definition of "replaced" should clarify that EVSPs can choose one indicator to indicate when a station is truly being replaced, rather than receiving maintenance or repairs.

Per the modified text on page 3, the definition of "replaced" means that, "the EVSE has been substantially modified or substituted with another unit, as indicated by a change in the serial number, EVSE ID, or the model name of the EVSE", and states on page 4 that when an EVSE is "replaced", it must come into compliance with the payment method requirement. Using the change in serial number to indicate a "substantial modification" is problematic for EV charging stations as smaller part replacements or repairs can trigger a serial number change. For example, with our L2 stations, if there is any issue with the station than the head (or the "brains") is replaced, which triggers a serial number change. This is not a "substantial modification", but rather maintenance that could occur every few years over the life of the station.

This replacement provision may also put customers at odds with uptime requirements under utility programs and California Energy Commission programs. For example, under the CEC CalEVIP Southern



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California Incentive Program, recipients of this DC fast charger rebate must keep their station operational for five years. Awards are being made now and many of the chargers in this program must be installed prior to July 2020, which would mean they would still be required to be operational after this regulation goes into effect in 2022. If a part needs to be changed to keep the station operational, this could trigger a serial number change, forcing the site host to immediately replace the entire station with one that has a chip reader on it, thus forcing the site host to pay fully for a new station they had previously received a rebate towards the cost of. If the site host does not repair the station in order to avoid the cost of an entirely new station, they are also not in compliant with the CalEVIP terms to keep the station up and running.

Thus, requiring a change in serial number to trigger the compliance for the payment methodology could result in site hosts declining to repair broken stations in an effort to avoid having to rip and replace an otherwise perfectly good station.

Recommendation: ChargePoint respectfully requests ARB allow EVSPs the flexibility to choose which indicator is more appropriate to identify replacement or substantial modification of a charger. If neither of these are appropriate, they should be able to work with ARB on developing or identifying another surrogate that is appropriate. Therefore, we support the Electric Vehicle Charging Association’s proposed changes to the definition of “replaced”:

“Replaced” means that the EVSE has been substantially modified or substituted with another unit, as indicated by a change in **only one of the following**: the serial number, EVSE ID, or the model name of the EVSE. **EVSPs shall select one of these indicators as the appropriate measure and notify the Executive Officer of its selection upon submission of its first annual report. If none of these indicators is appropriate, the EVSP may request for use of another indicator that is subject to approval from the Executive Officer.**

Given this, we also recommend the reporting requirements listed in (C) on page 8 should be changed to mirror this flexibility, and thus allowing EVSPs to report which indicator – the EVSE ID, serial number, or something else – as the unique identifier for each charging station in the field.

- b. Definition of “publicly available” should reflect parity in the treatment of “visitors” at workplace and residential sites.

On page 3, the exceptions to “publicly available” are defined as follows:

A publicly available EVSE does not include:

(i) A workplace EVSE and its associated parking space if it is clearly marked and operated as available exclusively to employees or contracted drivers. For the purposes for this chapter contracted drivers includes participating drivers, as that term is defined in Public Utilities Code § 5431, regardless of the physical accessibility of the EVSE to the public;

*(ii) An EVSE and associated parking spaces reserved exclusively to residents, tenants, **visitors**, or employees of a private residence or common interest development; or a residential building adjacent to private residence; ...” (emphasis added).*



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Similar to visitors who charge at a residential site, workplace visitors are limited to those who have business with the workplace and thus the station is not open to anyone from the general public.

Recommendation: ChargePoint respectfully urges parity in these definitions so that workplaces who allow their visitors to charge do not to threaten their “private” status:

(i) A workplace EVSE and its associated parking space if it is clearly marked and operated as available exclusively to employees, **visitors**, or contracted drivers...

2. § 2360.2 Specify a Process for the Technology Review in the Regulation

We would like to reiterate the points made in our comments on the draft regulatory language, dated June 24, 2019, which reflect our concerns with the adverse impacts associated with requiring an EMV chip reader on public chargers.

At the June 27 board hearing when the board voted to adopt these proposed regulations, they also discussed their desire for a “technology review” (the “Berg” amendment) of the payment technologies. We strongly support a review of various payment technologies’ ubiquity among consumers prior to the 2022 and 2023 compliance dates for new EVSE. The payment industry is rapidly evolving, and as we have already seen, other payment types, including contactless credit cards, are becoming more and more common among consumers. By the time the regulation comes into effect for new EVSE, payment technologies will have increasingly shifted to contactless cards and mobile payment.

Recommendation: ChargePoint respectfully request that this technology review be referenced in the modified text and ARB initiate this technology review by January 2021 and conclude it within six months to allow ample time to discuss and assess the state of payment technologies, and adjust manufacturing and supply chain timelines for products needed to comply with this regulation. Additionally, metrics to measure developments in the payment industry should be based on external data such as number or percentage of credit cards issued that have contactless capability or percent of drivers with smartphones, not simply on reporting from EVSPs, to capture a comprehensive picture of the larger market.

3. § 2360.4 Reporting for Electric Vehicle Service Providers

The proposed regulation requires EVSEs 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 jeopardize sensitive customer and business data and reduce the value of charging networks’ data to customers. Currently, our software does not track or process this kind


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of data. A payment made via NFC could be from a contactless credit card or Android Pay or Apple Pay or ChargePoint account. A toll-free number could be used to make a payment via credit card or NFC or RFID. A “service provider application” or mobile app would enable payment via NFC. A station that does not charge a fee would not be required to follow other parts of this regulation yet would still need to report methods of payment under this section.

Overall, this reporting requirement would require our software to be redesigned to attempt to track this secondary level of detail on payments and somehow avoid double counting to ensure accuracy, which would be onerous to engineer if not impossible. Furthermore, there are roughly 12 million transactions happening annually at our charging stations in California and 63.9 million worldwide, through various forms of payment. To create, sort, and organize new data fields, as well as store expanded data sets, in the form requested is operationally complex and will require significant staffing to handle. These additional administrative costs will be passed onto customers and ratepayers in utility charging programs, thus negatively impact our efforts to scale up infrastructure deployment in support of the state’s climate goals.

Recommendation: ChargePoint respectfully requests that ARB amends these reporting requirements as follows:

- 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.~~

Also, as noted above, we also recommend the reporting requirements listed in (C) on page 8 should be changed to mirror the flexibility in indicators, and thus allowing EVSPs to report which indicator – the EVSE ID, serial number, or something else – as the unique identifier for each charging station in the field.

We greatly appreciate the opportunity to provide these comments. If you have any questions or seek further clarification, please contact Alex Leumer, alexandra.leumer@chargepoint.com.

Sincerely,

Alexandra Leumer
 Director of Public Policy
 ChargePoint