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*Comment Received From: ChargePoint*  
*Submitted On: 2/26/2021*  
*Docket Number: 19-AB-2127*

**Comments AB 2127 EV Charging Infrastructure Assessment**

*Additional submitted attachment is included below.*



February 25, 2021

California Energy Commission  
1516 Nineth Street  
Sacramento, CA 95814-5512

RE: 19-AB-2127 – Implementation of AB 2127 Electric Vehicle Charging Assessment

ChargePoint appreciates the opportunity to provide comments on the inaugural AB 2127 Electric Vehicle Charging Assessment. This report examines the charging infrastructure needed to support the Zero Emission Vehicle (ZEV) adoption target of five million ZEVs by 2030 and the expanded targets identified in Governor Newsom's Executive Order N-72-20. As one of the world's leading EV charging networks, ChargePoint has developed and delivered charging solutions for workplaces, cities, retailers, apartments, utilities, hospitals, and fleets, all of which are critical to enabling the ZEV future that this report outlines.

While there is a lot of material to consider in the AB 2127 report, ChargePoint is going to focus these comments on the discussion around standards for charging equipment hardware and software. Overall, we appreciate and are committed to maximizing grid integration, energy resilience, and ease of use, in the products and services that ChargePoint designs and sells. We disagree however with some of the approaches proposed as "mandatory" in the AB 2127 report and urge the Commission to not slow down deployment of chargers, particularly in underserved markets in state, by predetermining the outcome of global standards discussions. These proposals will unnecessarily limit the charging equipment choices that participants in the Commission's funding opportunities will have in the coming years and are not needed to accomplish the goals outlined by the AB 2127 report and other complimentary state policy.

#### *Vehicle Connector Standards*

At the February 5, 2021 workshop, it was recommended that the California Energy Commission (CEC) "align technical requirements with market and CARB rulemaking."<sup>1</sup> ChargePoint supports the CEC continuing to monitor trends in vehicle adoption and connection standards. We agree that it may be time to consider CCS as the favored approach for light duty vehicles, in particular for new infrastructure investments. However, we note that the average life of a vehicle in the US is 11.8 years, and while drivers may not keep their vehicles that entire time, used EVs can be important to the

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<sup>1</sup> California Energy Commission, [Presentation](#) - AB 2127 – 2-5-2021 (February 5, 2021), slide 40.

lower income market.<sup>2</sup> Therefore, the CEC should be deliberate in its approach to shift technology requirements that may still support vehicles out on the roads today, particularly on critical infrastructure including highway corridor projects.

As it relates to medium and heavy duty electrification, ChargePoint urges the CEC to stay apprised of global developments of higher speed connectors, and stay coordinated with the California Air Resources Board on any vehicle standards mandates.

### *Interoperability Standards*

In the AB 2127 report and at the workshops, references were made to prioritizing funding for chargers “which conform to existing and pending standards.”<sup>3</sup> ChargePoint continues to support the CEC requiring chargers to conform with existing standards. Mandating chargers to comply with pending standards gets ahead of the established standards making process, that provides careful and critical examination of technical issues while enabling hardware and software manufacturers to align with requirements in timelines appropriate for market development. We strongly oppose the CEC, or any other state agency, picking “pending standards” as requirements for funding. Specifically, ChargePoint urges the CEC not to mandate Open Charge Point Protocol (OCPP), which is not yet a standard. “Mixing chargers with management solutions” is a specific business model, and not necessarily a “customer benefit” and certainly not a mandate for VGI. Mandating “management solutions” picks winners for reasons totally unrelated to driver experience or station and grid reliability. In fact, the functions that the CEC highlights as “features” of OCPP including billing, access controls, reservations, and grid signals are not exclusive to OCPP, rather are functions of many management solutions. The International Electrotechnical Commission (IEC) 63110 standards making process is underway, the CEC should monitor this process, but refrain from skipping ahead of this robust international standards making process.

### *VGI Standards*

ChargePoint appreciates the need to consider vehicle grid integration. However, we are concerned that AB 2127 focuses too heavily on bidirectional charging, which no vehicle commercially available in the US is doing outside of very limited pilots, and suggests that requirements for ISO/IEC15118 should be in place now to support “high-level communication” to enable this type of charging.<sup>4</sup> While 15118 and bidirectional charging may be appropriate investments for CEC funded R&D grants, such as BESTFIT, it is premature to require these immature technologies and standards for CALeVIP or any programs aimed at deploying chargers for public use at this time. An approach similar to GRO-20-605, BestFIT Innovative Charging Solutions would provide the CEC the ability to identify the problem to be solved (e.g., ancillary services) while providing a level playing for the industry to solve them. BESTFIT’s approach with multiple technological focus areas would enable equal opportunity amongst technologies while application

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<sup>2</sup> HIS Markit, [New Release](#), Average Age of Cars and Light Trucks in the U.S. Rises Again in 2019 to 11.8 years, HIS Markit Says, June 27, 2019.

<sup>3</sup> California Energy Commission, [Presentation](#) - AB 2127 – 2-5-2021 (February 5, 2021), slide 41

<sup>4</sup> California Energy Commission, [Presentation](#) - AB 2127 – 2-5-2021 (February 5, 2021), slide 42

screening and technical scoring would ensure the most impactful solutions are proposed for award. Furthermore, there is significant progress being made to develop future versions of ISO/IEC 15118 through the ISO/IEC Joint Working Group and address the cybersecurity risks posed by the current and upcoming versions of ISO/IEC 15118, in the SAE EV Charging PKI Collaborative Research Project. The SAE PKI work is currently scheduled to be completed in the second half of 2022. Therefore, considering these facts, mandating ISO/IEC 15118 is premature and its use outside of specific demonstration projects could create widespread customer data and other security risks in the name of VGI. The elements of VGI identified as dependent on ISO/IEC 15118 by this draft proposal are in fact not dependent on ISO/IEC 15118, including billing, carbon intensity, and demand response, all of which are currently available across network functions on a broad range of chargers and networks.

Thank you for considering our comments. ChargePoint looks forward to additional discussion on this assessment and infrastructure needs in the state over the coming months.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Wilson". The signature is stylized with a large, looping initial "J" and a cursive "Wilson".

Justin Wilson  
Director, Public Policy