

**DOCKETED**

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*Comment Received From: Enel X North America, Inc.*  
*Submitted On: 12/13/2019*  
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**Enel X Comments on Future CALeVIP Technical Requirements**

*Additional submitted attachment is included below.*

December 13, 2019

California Energy Commission  
Docket Unit MS-4  
Re: Docket No. 17-EVI-01  
1516 9th Street  
Sacramento, CA 95815

**Re: CALeVIP Future Equipment Requirements (Docket 17-EVI-01)**

Dear Commissioner Monahan and Staff:

Enel X North America, Inc. (Enel X) appreciates the opportunity to comment on the California Energy Commission's (CEC) proposed Future Equipment Requirements for the California Electric Vehicle (EV) Infrastructure Project (CALeVIP), as presented at the November 18, 2019 Staff workshop.

Enel X e-Mobility, formerly eMotorWerks, is a market-leading provider of EV charging technologies. Enel X manufactures and sells the JuiceBox, the best-selling smart Level 2 residential EV charger on Amazon, along with a comprehensive line-up of commercial Level 2 hardware solutions that will soon be announced. These products run on JuiceNet, Enel X's cloud-based software platform used for asset management, EV charging submetering and data transfer, and flexible control of EV charging for the provision of vehicle-grid integration services.

Enel X supports the CEC's efforts to continually refine the technical requirements for its jurisdictional EV infrastructure investments towards the goals of interoperability, competition, customer choice, cost control, and convenience.<sup>1</sup> Our comments focus on the following proposals for future equipment requirements reviewed during the Staff workshop:

- Open, Standards-Based Network Communications between the cloud and EV supply equipment (EVSE);
- High-Level Communications between the EV and EVSE using ISO/IEC 15118;
- Energy Star certification requirement for DC fast charge (DCFC) stations; and
- Appropriate level of certification for EVSE compliance and functionality with the above.

**1. Open, Standards-Based Network Communications**

Enel X supports a requirement for open, standards-based networked communications between the cloud and EVSE in the 2021 project year. However, we do not support prescribing a specific protocol to meet this requirement at this time, due to the lack of an international standard maintained by a formal standards development organization. OCPP is the de facto industry standard today, but different versions of the protocol are not interoperable with each other (e.g., OCPP 1.6-J is not interoperable with OCPP 2.0). Furthermore, OCPP is expected to become obsolete once an international standard, such as ISO/IEC 63110, is developed.

As such, we would support a flexible implementation of the open protocol communications requirement for 2021, beyond the current requirement to be able to revert to an open standard, as long as any version from OCPP 1.5 and above is acceptable, and as long as ISO/IEC 63110

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<sup>1</sup> CEC Staff, *Future Equipment Requirements for CALeVIP Workshop Presentation* (Presentation) November 18, 2019, slide 20.



is also acceptable. “First-party” or self-certification should suffice to deem compliance with open protocol functionality, until a standardized testing and certification regime is created to accompany an international standard.

## **2. High-Level Communications between the EV and EVSE**

Enel X supports a requirement for high-level communications between the EV and EVSE using ISO/IEC 15118. While there are incremental hardware and networking costs associated with providing 15118 capabilities, rolling these into eligible CALeVIP project costs helps ensure customer adoption despite the relative premium of 15118-capable EVSE. To this end, we recommend extending the minimum networking agreement for Level 2 projects from 2 to 5 years, comparable to DCFC projects, to provide adequate coverage for ongoing networking costs to support 15118 functionality.<sup>2</sup>

Enel X recommends further discussions among industry stakeholders including the CEC, EVSE manufacturers and service providers, automotive OEMs, industry consortia, and independent testing labs to determine the appropriate start-date, level of certification, and specific version of ISO 15118 entailed by this requirement. Enel X is aware that several OEMs are developing 15118 capabilities, but we are not aware of which versions of 15118 these OEMs are planning to support. Furthermore, we are skeptical that many OEMs will have deployed a critical mass of 15118-capable vehicles by mid-2021 to necessarily justify requiring 15118 capabilities for the 2021 project year.

Similarly, more conversations are needed to determine the level of certification that is required and the regime for overseeing testing and certification. In their comments submitted today, CharIN<sup>3</sup> describes forthcoming opportunities for ISO 15118 interoperability testing and development of a standardized conformance test that can be used for third-party certification. These could provide a promising foundation on which to base future certification regimes, but further industry experience, feedback, and refinement is required before adopting these as a condition of CALeVIP eligibility.

## **3. Energy Star requirement for DCFC Stations**

Staff’s workshop presentation notes that “CEC will require DCFC certification in [2021] CALeVIP pending EPA’s specified effective date of the specification in 2020.”<sup>4</sup> Given the novelty of the DCFC Energy Star specification and the tight timelines between its anticipated Q1-Q2 2020 availability and 2021 CALeVIP projects, Enel X recommends that the CEC build in a minimum of 15 months between the effective date of the Energy Star specification and the requirement for CALeVIP eligibility. This will ensure that hardware manufacturers have adequate time to adjust their products in the instance that EPA experiences delays in finalizing its Energy Star specification.

## **4. Conclusion**

Enel X thanks the CEC for its consideration of these comments and looks forward to continuing collaboration with the agency and other industry stakeholders to foster innovation in the EV charging space.

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<sup>2</sup> See Presentation, slide 9.

<sup>3</sup> *CharIN Interface Initiative Comments - Future Equipment Requirements for CALeVIP - CharIN Answers*, submitted December 13, 2019 in Docket 17-EVI-01.

<sup>4</sup> Presentation, Slide 26.



Sincerely,

**/s/ Marc Monbouquette**

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