

**DOCKETED**

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*Comment Received From: Megha Lakhchaura*  
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**Comments from EVBox on CALeVIP requirements**

*Additional submitted attachment is included below.*



December 13, 2019

Mr. Noel Crisostomo  
Air Pollution Control Specialist  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

Re: Proposed Changes to CALeVIP Program Requirements,

Dear Mr. Crisostomo,

EVBox welcomes the opportunity to provide comments to the California Energy Commission's (CEC) workshop on proposed changes to the requirements for the CALeVIP program. We commend the CEC for being forward looking and considering requirements with the lens of future-proofing Electric Vehicle (EV) charging infrastructure.

EVBox is headquartered in Netherlands and is a manufacturer of EV charging equipment and related cloud-based services with an installed base of over 100,000 level 2 and DC fast chargers in 55 countries. EVBox is actively deploying charging stations all over North America.

In general, we recommend that the CEC only institute a mandatory requirement in CALeVIP programs, if and when a test is fully developed, testing labs are in place, and the use cases are ready. The requirement should logically follow when all of these criteria are in place and not the other way around. Creating hasty burdensome requirements only results in manufacturers investing in expensive equipment that might not even work the way that the CEC intends for the charging infrastructure to function. Our positions on the various tests and requirements are outlined below.

### **ENERGY STAR Certification**

While EVBox is supportive of a general adoption of ENERGY STAR Certification, we caution against pre-maturely mandating a requirement for DC fast chargers when several critical pieces are not in place.

First, the final version of ENERGY STAR certification test for DC fast chargers is not ready. While the draft final test method issued in September 2019 gives an indication of what the test looks like, the Environmental Protection Agency (EPA) is still in the process of collecting data before it reveals the final test method. EPA clarified that the final tests would not be ready before the summer of 2020. Second, EPA could also not shed any light on the testing labs that have been finalized to certify the equipment. In the absence of a test and a tester, it is not prudent to create requirements on hardware manufacturers.

Elaborating further on the proposed timeline, even if the EPA meets this date, and the final test has no glitches, it only leaves six months for equipment to be certified. Our experience has revealed that it takes several months to even get a testing date from testing laboratories, and we are unclear regarding the processes and durations of these tests. Considering that there might be some adjustments required to the equipment if the equipment does not pass the test, a six-month deadline towards achieving ENERGY STAR certification is unrealistic.



We recommend that the CEC wait and observe how the tests are implemented before making this a requirement. And in no circumstances, should this be required before 2022.

### **Open Charge Point Protocol (OCPP)**

At this stage we believe OCPP specification for CALeVIP is adequate and does not require modification.

Having said that, EVBox is a strong supporter of the Open Charge Alliance (OCA) certification program, which is a joint effort of the and several independent test laboratories around the world to test OCPP 1.6 on conformance to the OCPP specification<sup>1</sup>. EVBox supports the OCA certification as a litmus test for OCPP compliance.

The OCA is a global consortium of over 120 public and private EV infrastructure leaders and includes including charging equipment manufacturers, software and systems providers, charging network operators, utilities, DSOs and research organizations. OCA has a mission is to foster global development, adoption, and compliance of communication protocols in the EV charging infrastructure and related standards through collaboration, education, testing, and certification with a fundamental commitment to open and free to use processes and products. For a decade OCA has upheld OCPP as vital standard and prior to developing the OCPP certification, OCA developed a testing tool for OCPP compliance. From the perspective of EVBox , the OCA certification is the legitimate criterion for OCPP 1.6 compliance.

### **ISO 15118 Requirements**

While EVBox in general supports the implementation of ISO/IEC 15118 communication between plug-in EVs and chargers, we believe it is pre-mature to make this a requirement starting January 2021 for various reasons outlined below. We request that the CEC not establish any deadline but consider January 2022 and beyond as a more realistic deadline.

While the automotive sector has expressed continued support for ISO15118, we have yet to see cars on the road that have fully embraced the standard. We believe that this will happen with time but in the interim, it is impossible to move beyond simulated lab testing environment to full testing for different cars – a criterion that is required to finalize a product.

While EVBox is on the path to eventually incorporate ISO 15118 standards into its hardware, we would like to point out that product development takes time. It involves research, engineering, design, testing and thousands of manual hours into developing a new charger. Furthermore, UL certifications add on significant time for a new product to enter the market. Incorporating an ISO 15118 requirement for January 2021 CALeVIP grants, will significantly winnow down the number of eligible vendors for the CALeVIP programs since most vendors are still in the process of incorporating ISO 15118 communication protocol into new products.

We also request the CEC to be more specific about the use cases that it is considering. In the absence of a public key infrastructure, most of the benefits of ISO 15118 are far from fruition. The current vehicle to grid integration use cases being developed at the California Public Utilities Commission do not require ISO 15118. The cars are not ready yet. In the absence of a fully developed practical use for ISO 15118, it seems burdensome to require manufacturers to be compliant with the requirement within a year. Also, in the absence of tests to determine whether chargers are compliant, there is no authentic method to even determine whether a charger is 15118 compliant.

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<sup>1</sup> <https://www.openchargealliance.org/certification/occp-16-certification/>



We recommend that the CEC focus on specific implementable use cases, encourage a testing requirement, keep an eye on vehicles adopting the standard before mandating ISO 15118 requirements on EVSE manufacturers. In no case, should it consider doing so before 2022.

### **SB 454 requirements**

We recommend that the CEC align with the California Air Resource Board (CARB) requirement for payment methods on EV charging infrastructure and not create separate requirements.

In conclusion, we thank the CEC for providing an open forum to discuss these requirements and solicit industry input before making any final determination. The CALeVIP grants have been critical to supporting the growth of EV infrastructure in California and we are immensely grateful to you and CEC for your continued support of the program.

Sincerely,

Megha Lakhchaura

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