DOCKETED	
Docket Number:	17-EVI-01
Project Title:	Block Grant for Electric Vehicle Charger Incentive Projects
TN #:	224049
Document Title:	Hubject Comments Re CALeVIP Equipment Requirements
Description:	N/A
Filer:	System
Organization:	Hubject, Inc./Paul Glenney
Submitter Role:	Public
Submission Date:	7/3/2018 4:28:38 PM
Docketed Date:	7/3/2018

Comment Received From: Paul Glenney

Submitted On: 7/3/2018 Docket Number: 17-EVI-01

## **Hubject Comments Re: CALeVIP Equipment Requirements**

Additional submitted attachment is included below.



July 3, 2018

California Energy Commission Docket No. 17-EVI-01 1516 Ninth Street Sacramento, CA 95814

Re: Alternative and Renewable Fuel and Vehicle Technology Program – CALeVIP

Hubject Inc. appreciates the opportunity to provide input on the CALeVIP program. We commend the State of California and the Energy Commission for its dedication to increasing electric vehicle (EV) adoption. We support the Energy Commission's efforts to implement inclusive EV initiatives, providing EV drivers in all California communities access to EV charging stations.

Hubject's electric vehicle charging software platform enables interoperability between charging networks. Hubject currently connects more than 70,000 charging ports in more than 26 countries through the Open InterCharge Protocol (OICP); the most globally-recognized interoperability protocol. OICP is inclusive and welcomes any and all market participants, regardless of their size. With over 350 partners on 4 continents, this interoperability protocol was established in 2012 and is the most mature and commonly-used protocol worldwide. Through ease of implementation, OICP reduces costs and time to market while increasing reliability for EV drivers. OICP enables secure and convenient access and payment across charging networks for EV drivers by connecting all participants in the electric vehicle charging ecosystem including: utilities, automotive manufacturers and electric vehicle service providers (EVSPs).

We strongly support the inclusion of interoperability as a potential requirement within the CALeVIP program. A major barrier to mass adoption of electric vehicles is consumer anxiety about adequate access to public charging stations and the inconvenience and complexity stemming from exclusive membership requirements currently imposed by multiple separate service providers. While the number of EV chargers deployed is growing rapidly, they are controlled and managed by different operators, each with their own registration, mapping and access method, thereby rendering one operator's chargers inaccessible to the customers registered with another operator. This fragmentation requires EV drivers to register and manage several memberships to access chargers with multiple RFID cards and mobile apps. Achieving seamless interoperability between EV charging operators, including locating, activating, and paying in a secure manner, is needed to eliminate consumer concerns about compatibility, accessibility, and ecommerce security.

Hubject respectfully requests the Energy Commission include options for different protocols to optimize interoperability and allow for easy interaction between charging operators providing end users with complete information in a secure manner to simplify consumer experience, maximize convenience, minimize cost, facilitate a positive driving experience, and help drive EV adoption. Specifically, there is a need to include both Open InterCharge Protocol (OICP) and Open Charge Point Interface (OCPI). There are many companies that utilize both OICP and OCPI protocols simultaneously – and this would provide the option for network providers to choose the best protocol for their needs.



Hubject also supports the inclusion of ISO / IEC 15118 as potential requirements within the CALeVIP program and recommends including this for both AC and DC stations. Including ISO 15118 will enable Plug & Charge capabilities resulting in an easy and seamless charging experience for the EV driver, as well as smart charging and the integration of EVs into the grid. ISO 15118 will also help enable bi-directional electricity flow and inductive charging, which will pave the way towards future autonomous charging. With many of the largest global OEMs intending to include the ISO 15118 standard, we recommend the Energy Commission consider including the need for charging stations to be ISO 15118 ready – and also consider requiring the integration by December 31, 2020 for new, publicly funded AC and DC charging stations. We believe this will coincide with increasing vehicle availability in years to come, thus, ensuring new charging stations are ISO 15118 ready for Plug & Charge.

In order to overcome obstacles to widespread adoption of zero-emission vehicles and increase convenience, efficiency, and security for EV drivers, we respectfully request providing options to optimize interoperability – specifically including both OICP and OCPI as interoperability protocols.

We thank you for your consideration and look forward to continuing to work with the Energy Commission to make EV charging easy and accessible for everyone. Please feel free to contact me if you have any questions.

Sincerely,

Paul M. Glenney

Pel-Oly

CEO

Hubject Inc.