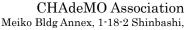
DOCKETED	
Docket Number:	17-EVI-01
Project Title:	Block Grant for Electric Vehicle Charger Incentive Projects
TN #:	231295
Document Title:	CHAdeMO Association Comments - Comments on Future Equipment Requirements
Description:	N/A
Filer:	System
Organization:	CHAdeMO Association
Submitter Role:	Public
Submission Date:	12/20/2019 1:00:51 AM
Docketed Date:	12/20/2019

Comment Received From: CHAdeMO Association

Submitted On: 12/20/2019 Docket Number: 17-EVI-01

## **Comments on Future Equipment Requirements**

Additional submitted attachment is included below.



Minato-ku, Tokyo, 105-0004 Japan Tel: +81-3-6205-4577



December 13, 2019

California Energy Commission 1516 9<sup>th</sup> Street Sacramento, CA 95815

Re: Staff Workshop on Future Equipment Requirements for CALeVIP

CHAdeMO Association appreciates the opportunity to provide feedback on the Future Equipment Requirements for CALeVIP prepared and presented by the California Energy Commission (CEC) on November 18<sup>th</sup>, to which the leader of the CHAdeMO Association would like to comment.

CHAdeMO Association fully supports the Energy Commission's efforts to develop future equipment requirements for CALeVIP. We agree that the program plays an important role in accelerating the development of innovative technologies to improve the efficiency of charging infrastructure.

We have sought the industrial experts of CHAdeMO Association, for their comments on the Future Equipment Requirements for CALeVIP presented at the workshop on November 18<sup>th</sup> (from Tomoya Imazu, Takafumi Anegawa, Hidetoshi Kusumi, Yoshiyuki Tanaka, Koji Abe, Koichi Hiraoka, Atsushi Namba, Katsutohi Nosaki and Kimio Yatabe). We respectfully submit our consolidated comments, particularly regarding the New Proposal for 2021+ Projects (slide #21).

In the new proposal, ISO/IEC 15118 is solely listed as communication protocol between EVSE and EV for SAE J1772 conductive charging, AC Level 2 charging (6.2 kW+), and DC Level 1 & 2 charging (6.2 kW+). We strongly suggest that IEEE2030.1.1(CHAdeMO), which covers DC Level 1 & 2 charging (6.2 kW+) with proven track record $^1$ , be added to the diagram as another option for communication between EVSE and EV.

- IEEE2030.1.1(CHAdeMO) is an established global technology which has already been deployed in a number of large-scale pilot projects and commercial products with bidirectional capabilities (e.g. Vehicle-to-Home and Vehicle-to-Grid units already in production in Japan, United Kingdom, etc.). It is a communication protocol that covers DC charging up to 400 kW.
- Excluding existing established technology from future equipment requirements would hinder competition and customer choice, which is stated as one of the pillars of the refined goals of the future equipment requirements proposed by the Energy Commission. Technology which has already been proven in the market should continue to be provided as an option for future equipment requirements.
- Additionally, while the scope of discussion is technical requirements for future charging infrastructure, it should be kept in mind that telematics is another established solution for communication between EVSE and EV.

<sup>1</sup> More than 7000 DC chargers with output under Level 2 are manufactured and in operation globally not only in North America but also in Europe and Japan. Such chargers equipped with bidirectional power capabilities can discharge power from the vehicle to home and building, which make them effective solution for improving power resiliency.

\_

Meiko Bldg Annex, 1-18-2 Shinbashi, Minato ku, Tokyo, 105-0004 Japan

Tel: +81-3-6205-4577

Therefore, to reiterate, we strongly suggest that IEEE2030.1.1(CHAdeMO), which is a market-proven technology that covers DC charging, should be listed on slide #21 along with ISO/IEC 15118, as an option for communication protocol between EVSE and EV<sup>2</sup>. This would foster competition and customer choice, which is stated as one of the main principles of future equipment requirements.

We appreciate your consideration of our comments, and we look forward to continuing working with the Energy Commission staff and other agencies.

Sincerely,

Tomoya Imazu

Tehnical Working Group Leader of CHAdeMO Association

This document is consolidated comments of the following experts:

Tomoya Imazu (CHAdeMO)
Takafumi Anegawa (TEPCO)
Hidetoshi Kusumi (Toyota)
Yoshiyuki Tanaka (NISSAN)
Koji Abe (Panasonic)
Koichi Hiraoka (Hitachi)
Atsushi Namba (SUBARU)
Katsutohi Nosaki (Honda)

Kimio Yatabe (MMC)

<sup>&</sup>lt;sup>2</sup> It may be simpler to alternate categorization of infrastructure shown on slide #21 and #23 from "SAE J1772 Conductive" and "Fast Charging" to "AC Charging" and "DC Charging"; in this case, we suggest that IEEE 2030.1.1(CHAdeMO) be listed along ISO/IEC 15118 for DC Charging as options for communication protocol between EVSE and the EV.