

DOCKETED

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California Energy Commission
Re: Docket No. 22-EVI-06

Submitted via electronic commenting system for docket 22-EVI-06

Re: Workshop on Charging Interoperability and Collaboration Yard Funding Concept

The CHAdEMO Association (CHAdEMO) appreciates the opportunity to provide comments on the Charging Interoperability and Collaboration Yard Funding Concept (Charge Yard) workshop held on May 5th. CHAdEMO greatly appreciates Staff's work on the proposed concept and advancing reliable, seamless, and innovative EV charging in the State of California. Comprised of over 500 members, the CHAdEMO is a non-profit association committed to "Powering global zero-emission mobility for the happiness of future generations." CHAdEMO membership includes major automakers including General Motors, Honda, Isuzu, Jaguar Land Rover, Mazda, Mitsubishi Motors, Nissan, Subaru, Tesla, and Toyota, zero-emission trucks, and buses manufacturers, 50 charging station manufacturers (with over 260 certified charger models), off-road vehicle manufacturers and other industry and government leaders supporting transportation electrification.

CHAdEMO generally supports the Charge Yard concept and encourages staff to consider CHAdEMO as a technical resource. We fully understand the technical and organizational challenges of interoperability. To directly resolve this problem, CHAdEMO successfully developed standards, specifications and, most importantly, an EVSE certification program requiring successful completion of an impartial third-party certification testing system. The result is all CHAdEMO EVSEs work with all CHAdEMO vehicles = true interoperability. Based upon our experience, the "Consistent and uniform implementation of global standards" is dependent upon "Accelerated development of scalable certification procedures." While the Charge Yard concept can provide testing support, the primary development of scalable certification procedures needs to be done within the charging standards organizations. Therefore, we recommend specific technical requirements for Interoperability Testing (Staff Workshop Presentation Slides 15 and 16) should not be included. Instead, CEC should provide guidelines to host specific and discrete testing programs – primarily VGI, Plug and Charge/PKI testing and supporting the development of certification procedures. In this manner, the Charge Yard resources

can be prioritized to support specific programs and released when the programs are completed.

Since 2012, CHAdEMO has included the specification for bidirectional (V2G/VGI) power flow and nearly all existing CHAdEMO equipped EVs (over 40,000 in California alone) are capable for bidirectional power flow without any modifications. CHAdEMO strongly recommends Charge Yard support bidirectional or vehicle-to-everything (V2X) test beds, including vehicle-to-home, vehicle-to-building, and vehicle-to-grid. Collaboration should include utilities, automakers, EVSE OEMs, the Electric Power Research Institute (EPRI) and CHAdEMO to help demonstrate and evaluate the utility benefits and customer experience with these systems. Since CCS and ISO standards for bi-directional V2X are still under development, demonstrations with CHAdEMO EVSEs and vehicles will be important to provide timely evaluations of the bidirectional or vehicle-to-everything (V2X) technology.

We also recommend including cybersecurity as one of the components that can be demonstrated at Charge Yard. Also, we believe there are many other important developments necessary to create a “better than liquid refueling” experience. These could include improvements to EVSE display systems, payment devices, cable management and other factors that would improve the EV drivers recharging experiences.

Thank you for the opportunity to comment. If you have any questions, please contact me directly (patterson@chademo.org).

Sincerely,



David N. Patterson, P.E.
Executive Director
CHAdEMO Association North America