CalETC
California Electric Transportation Coalition

February 28, 2022

California Air Resources Board
Joshua Cunningham, Transportation Systems Regulations and Technology, Branch Chief
Stephanie Palmer, ZEV Implementation Section
Re: EVSE Standards Technology Review

Submitted via electronic commenting system to evsesd-comment-tr-ws

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The California Electric Transportation Coalition (CalETC) appreciates this opportunity to provide input on the Electric Vehicle Supply Equipment Standards Technology Review (Technology Review). We greatly appreciate all the work that went into this report and the balance of ensuring access to charging while trying to futureproof charging stations and minimize unnecessary hardware expenses.

CalETC supports and advocates for the transition to a zero-emission transportation future to spur economic growth, fuel diversity and energy independence, contribute to clean air, and combat climate change. CalETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation. Our Board of Directors includes representatives from: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, Southern California Public Power Authority, and the Northern California Power Agency. In addition to electric utilities, our membership includes major automakers, manufacturers of zero-emission trucks and buses, electric vehicle charging providers, autonomous electric vehicle fleet operators, and other industry leaders supporting transportation electrification.

CalETC supports the analysis, findings, and recommendations in CARB's Technology Review. While tap cards appear to be the future of payment and there are some differing opinions about the extent of market penetration, they do not appear to have garnered enough market share to replace EMV chip cards at this time. We support CARB's continued monitoring of the tap-enabled credit card market and the forward-looking analysis evaluating technologies with potential to serve as a satisfactory minimum option. CalETC encourages CARB to set a timeline for an update to the Technology Review to keep stakeholders and the regulation up to date on this rapidly developing market. For example, the US Department of Transportation will be releasing federal guidance for the National Electric Vehicle Infrastructure (NEVI) funding this May that is expected to include guidance on payment methods. Future updates to the Technology Review should take this guidance into consideration. In the next iteration of the Technology Review, we recommend CARB specify a standard that contactless payment technology must meet to be considered widely accessible to unbanked and underbanked Californians. Providing a clear standard gives industry certainty on the specific end goal CARB wants the market to work toward. Additionally, in coordination with the Division of Measurement Standards, we recommend CARB include vehicle-to-grid technologies in the next iteration of the Technology Review as they will be available in the

near term and should consider adding a distinction between bidirectional and unidirectional equipment to their EVSE labeling standards.

A key piece to evaluating all technology options is ensuring that unbanked, underbanked, low-income, and disadvantaged community members can access charging. CalETC echoes the Technology Review's findings that that tap and contactless payment methods may be beneficial to serve unbanked and underbanked drivers. We support CARB's recommendation to evaluate the methods of payment used by these community members to pay for transportation services, fueling and charging their vehicles, to ensure the regulation provides equitable access to charging and identifies gaps in payment solutions requiring further attention and development. These additional data points would help define the scope and extent of the problem we need to solve.

CalETC also supports determining whether membership is a real or perceived barrier to charging, and to the extent possible, encouraging roaming agreements between charging networks. CARB could also encourage universal payment options by requiring user interface capability with 3rd party payment applications, such as ParkMobile or ParkWhiz. Whereas this may require some research and development to establish the capability, these 3rd party payment apps have shown the ability to perform billing and payment across municipal agencies, private parties, and other parking venues as these systems interface with multiple parking meter manufacturers and back-office systems. These 3rd party payment apps are gaining in popularity and are already used in hundreds of cities in the U.S. Interfacing with 3rd party payment platforms could also be encouraged through funding incentive requirements for EVSE from other state agencies, such as the California Energy Commission that administers the bulk of the EVSE related funding. In addition, mobile phone payment applications have shown some additional benefits for the unbanked and underbanked, which could help address this important issue for those customers that do not rely on traditional credit cards. Enabling usage of public charging assets by the unbanked and underbanked is an important goal to help address equity access to clean transportation solutions in the state.

CalETC also supports CARB's study of reliability metrics in coordination with the Energy Commission that will seek to address charging station down time and improve driver experience. We encourage CARB staff to work with electric vehicle service providers (EVSPs), as many EVSPs have already begun implementing reliability metrics to improve the customer experience.[1] Additionally, Avista, an electric utility servicing parts of eastern Washington and northern Idaho, has conducted a reliability analysis of the EV chargers in its network, classified the severity of the problems, and quantified the cost of the average repair.[2] CalETC works with a number of utilities in California and the Pacific Northwest and would be happy to set up a meeting with CARB to share utilities' experiences with charging station reliability.

[1] FLO recommends a standard of 97% uptime for each public charging station with a minimum of two stations per charging site for redundancy. (See https://www.flo.com/blog/reliability-blog-series-2-supporting-ev-drivers-with-a-charging-station-reliability-standard-flo/.) EVgo has been able to achieve 98% uptime across its network. (See https://www.evgo.com/blog/underscoring-the-need-for-a-robust-resilient-ev-charging-network/.)

[2] See page 39-47 https://www.myavista.com/-/media/myavista/content-documents/energy-savings/electricvehiclesupplyequipmentpilotfinalreport.pdf?la=en.

Thank you for your consideration and CalETC looks forward to working with the CARB staff and board members on the evolution of the EVSE standards regulation.

Regards,

Kristian Corby, Deputy Executive Director
California Electric Transportation Coalition