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Plug In America Comments On EV Charging Interoperability

Additional submitted attachment is included below.



December 21, 2023

California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Re: Docket No. 22-EVI-06 – Staff Workshop on Electric Vehicle Charging Interoperability (December 2023)

On behalf of Plug In America, thank you for the opportunity to comment on the California Energy Commission's (CEC) interoperability vision. Plug In America is a national nonprofit with over 15 years of advocating for EV drivers and working to accelerate the adoption of electric vehicles. We appreciate the timely publishing of this vision as California scales electric vehicle (EV) adoption and increasing numbers of EV drivers rely on charging infrastructure to meet their daily needs.

Overall, we broadly support the direction laid out in the CEC's vision and appreciate the CEC's attention to the experience for the EV driver when charging a vehicle. This is evidenced by the CEC's long-term goal for "broad interoperability, meaning a future where any driver with any car can easily charge at any charger on any charging network."¹ We encourage the CEC to continue to center the driver perspective in interoperability visioning and planning to ensure that California develops charging infrastructure that works for the consumer and enables further EV adoption.

Plug In America conducts an annual survey of EV drivers and intenders (consumers who are considering or intending to purchase an EV) to gather data on the EV ownership experience. Our 2023 survey results conclude that "While EV owners intend to continue driving electric, they voiced frustration with public charging infrastructure, with the most common issues being 'broken or non-functional chargers' or 'too few charging locations.'"² Unfortunately, when compared to our 2022 survey results, the responses from our 2023 survey show diminishing driver satisfaction with all fast-charging networks, most notably with the public charging networks. The relative importance of the challenge remains the same—broken chargers are the leading concern—but the magnitude of concerns overall has increased. For the major public charging networks (Blink, ChargePoint, Electrify America, and EVgo) considered as a group, **the most prevalent concern was broken chargers**. With 37% noting this "a major concern" and 9% deeming it "a deal-breaker for using this network."³

¹ California Energy Commission, Staff Workshop on Electric Vehicle Charging Interoperability, December 1, 2023.

² 2023 EV Driver Survey, Plug In America, <https://pluginamerica.org/survey/2023-ev-driver-survey/>

³ 2023 EV Driver Survey, Plug In America, <https://pluginamerica.org/survey/2023-ev-driver-survey/>



Additionally, we conducted a topical survey in early October 2023 focused on the charging experience, to understand any new developments since our annual survey report. The October 2023 survey confirms that public charging has left consumers wanting more. 50% of respondents indicated that they were either “dissatisfied” or “very dissatisfied” with both public charger availability *and* reliability.⁴ Given these increased concerns, we especially appreciate the CEC publishing this timely vision on interoperability.

At Plug In America, we are hard at work to ensure that EV drivers have the right information to charge their vehicles to enable a functional charging experience. Even when equipped with the right information and an understanding of EV technology and charging infrastructure, the current public charging infrastructure still poses too many barriers for drivers to reliably charge their vehicles. We appreciate the CEC’s attention to the current charging experience from the perspective of the driver and the acknowledgment that “most drivers are expected to be hands-on as there is limited ability for a driver to simply ‘plug and charge’ to initiate and pay for a charging session.”⁵ Furthermore, as noted by the CEC, it is common for EV drivers to have folders of apps, multiple keycards, and multiple accounts to access chargers on different networks.

This complicated charging ecosystem and current experience for drivers pose high barriers to entry for EV drivers and are a potential deterrent to EV adoption. This is especially true as California enters the mainstream adoption phase with consumers who are accustomed to easy, quick, and reliable access to everything via their phones or who simply do not have the time to undergo a complex process to charge their vehicles.

One solution we are particularly interested in further exploring is network roaming. We encourage the CEC to further assess this solution and investigate how to increase roaming agreements between companies. EV charging network roaming agreements can make the charging experience more consumer-friendly and simplify the process for EV drivers. Having to download and understand multiple apps and app interfaces is not a user-friendly process and requires “special effort” on the part of the driver. Roaming agreements enable drivers to use their preferred app, one that they are comfortable with and fully understand how to use. This helps eliminate the need for folders of apps or tedious downloading or sifting to find and use a proprietary app. We strongly encourage the CEC to host a workshop next year (in 2024) to have an in-depth discussion on the types of roaming methods, lessons learned from other jurisdictions, and potential solutions on how best to increase roaming agreements to enable a seamless EV charging experience for drivers.

⁴ October 2023 Charging Survey. Plug In America, <http://pluginamerica.org/wp-content/uploads/2023/10/2023.10-Charging-Survey-Analysis.pdf>

⁵ California Energy Commission, Staff Workshop on Electric Vehicle Charging Interoperability, December 1, 2023.



In addition to pursuing network roaming as a solution, Plug In America supports the CEC's intention to continue to pursue a variety of methods for a driver to initiate a charging session. We believe it is essential for EV drivers to have options to initiate a charging session to select the one that best suits their needs.

Thank you for your consideration of these comments. Please do not hesitate to reach out if you have any questions.

Sincerely,

Joel Levin
Executive Director, Plug In America