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**Plug In America Comments on Proposed Regulations for EV
Charger Inventory, Utilization, and Reliability Reporting**

Additional submitted attachment is included below.



October 24, 2023

Mr. Dustin Schell
Air Resources Engineer
California Energy Commission
1516 Ninth Street Sacramento, CA 95814
Docket #: 22-EVI-04

Re: Proposed Regulations for Electric Vehicle Charger Inventory, Utilization, and Reliability Reporting

Dear Mr. Schell,

Thank you for the opportunity to comment on *Tracking California's Electric Vehicle Chargers: Proposed Regulations for Electric Vehicle Charger Inventory, Utilization, and Reliability*. Plug In America is a nonprofit organization that represents Electric Vehicle (EV) drivers across the United States. As such, Plug In America emphasizes the importance of a *reliable* EV charging network that serves all consumers. Consistently, EV drivers share significant concerns with the public charging experience.

Plug In America supports the CEC's intention to collect the proposed data to assess the state of charging in California and help ensure California's infrastructure is prepared for the continuing, rapid transition to EVs with accessible and reliable EV charging. We are eager to see CEC's analysis on current and future charging needs in California. We emphasize the comment made during the CEC workshop that "the number and disbursement of EV chargers needed to support California's EV goals depends on *how* the charging infrastructure is used."¹ With EV technology, there is an inherent opportunity that does not exist with gas-powered cars: EVs can be charged in public or at home. This means that in order to assess charging needs and identify and assess how drivers are charging, we must collect data across both public and privately-funded or used chargers. We appreciate that the CEC has proposed to go beyond assessing fast charging infrastructure to understand a more holistic picture of California's current charging availability when determining future needs. Especially as the CEC currently lacks robust data to support this crucial analysis, we support the proposed regulations for the collection of inventory, utilization and reliability data.

In order to continue to support the EV transition and consumers as they experience the benefits of driving electric vehicles, EV charging infrastructure must both be properly distributed and reliable. 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

¹ California Energy Commission, Workshop on Proposed Regulations for Electric Vehicle Charger Inventory, Utilization, and Reliability Reporting, October 9, 2023.



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, the responses between our 2022 versus 2023 survey results show diminishing driver satisfaction with all fast-charging networks, most notably with the public charging networks. The relative importance of challenges remains unchanged—broken chargers are again the leading concern—but the magnitude of concerns overall has increased. See Figure 15 and Figure 16 in the Appendix. For the major public charging networks (Blink, ChargePoint, Electrify America, and EVgo) taken as a group, **the most prevalent concern was broken chargers**. With 37% noting this “a major concern” and 9% noting it “a deal-breaker for using this network.”³ **The second-most prevalent concern for public networks was the sparseness of charging stations** (the stations being too far apart), which was in the top two ratings of concern for 38% of respondents (ranging from 36% to 42% across the four public charging networks considered).⁴ 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.⁵

Due to these findings and the overwhelming data that points to needed improvements for charging infrastructure reliability, Plug In America supports the proposed inventory reporting requirements. This data can help to inform the volume and distribution of charging stations needed across the state and alleviate driver concerns that charging stations are currently too far apart. As mentioned above, it is crucial to understand how chargers are being used in order to properly anticipate consumer needs. Plug In America agrees that a charging station with a high utilization rate (and reliable uptime) can support more EVs and believes it is important to have data that captures that. Therefore, we support the proposed utilization data requirements to capture a better understanding of how stations are being used and ultimately support more EVs.

Overall, Plug In America supports the proposed reliability reporting requirements. Specifically, we appreciate the CEC’s attention to gathering information on “total number of failed charging sessions” for the reporting period for public and/or ratepayer-funded networked chargers. We support CEC exploring methods to leverage the data collected through these requirements to improve public awareness of accessible and reliable EV charging stations—for example, a statewide charging station dashboard with real-time availability data. This exploration will also help prepare the CEC to fulfill the requirements of AB 126 to set standards for how stations notify customers about the availability and accessibility of publicly available charging

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/>

⁴ 2023 EV Driver Survey, Plug In America, <https://pluginamerica.org/survey/2023-ev-driver-survey/>

⁵ October 2023 Charging Survey. Plug In America, <http://pluginamerica.org/wp-content/uploads/2023/10/2023.10-Charging-Survey-Analysis.pdf>



infrastructure by laying the groundwork to understand the current state of charging infrastructure in California. Additionally, especially as the CEC executes AB 126, we encourage the CEC to continue to align with the federal charging minimum requirements in order to provide consistency for charging operators and consumers. We recommend that in concert with the proposed reliability reporting requirements, the CEC set an 97% uptime requirement to align with the federal National Electric Vehicle Infrastructure (NEVI) minimum standards. Moving forward, we recommend that the CEC increase the uptime requirement to 99% as soon as feasible.

Regarding downtime exclusions, we are pleased that staff intend for excluded downtime to be limited to situations that are entirely outside the charging station operator's control or ability to remedy. We support the reasonable exclusions that CEC has identified. In particular, we support the CEC's approach on communication network outages as an excluded category "*provided that the chargers default to free in the event of communications outages.*"⁶

We understand and support CEC's intent to publicly rank the reliability of major EV charging networks in the biennial assessments of the reliability of California's EV charging infrastructure starting in 2025. This ranking can help to provide external accountability for charging operators and continue to center the user experience in consideration of charging reliability. The ranking can help motivate charging network operators to better maintain their charging stations and improve overall reliability. Building on this public ranking, we recommend the CEC also consider more explicit enforcement mechanisms to ensure full compliance of the proposed reporting requirements and help deliver EV drivers a seamless, reliable charging experience. A few strategies to consider include: clawback mechanisms on state incentives received, penalty mechanisms, and deprioritizing or temporarily excluding the entity in question from the next round of funding.

Thank you again for the opportunity to provide feedback and 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

⁶ Schell, Dustin, Ralph Lee, and Michael Dioha. 2023. Tracking California's Electric Vehicle Chargers . California Energy Commission. Publication Number: CEC-600-2023-055.

APPENDIX

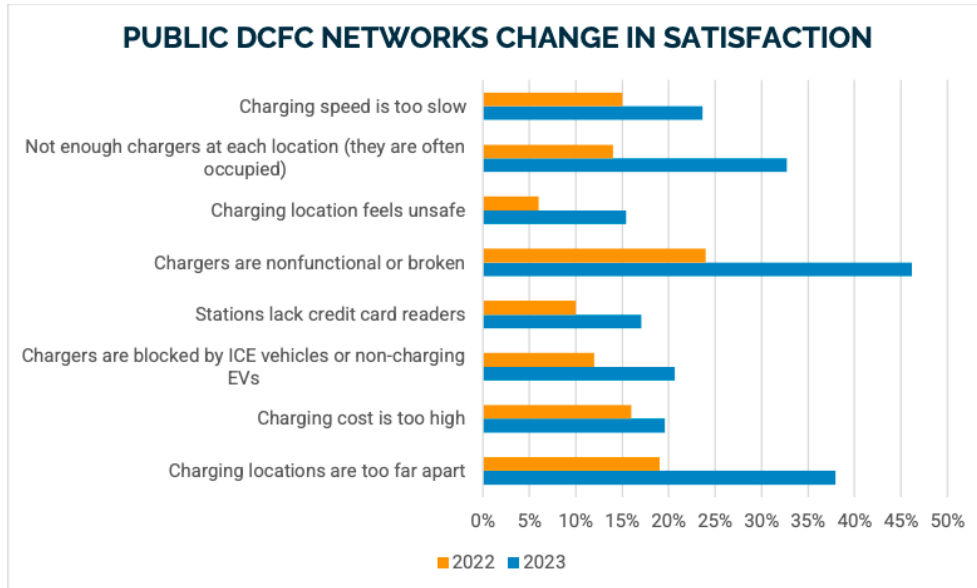


Figure 15: Public DCFC Networks Change in Satisfaction

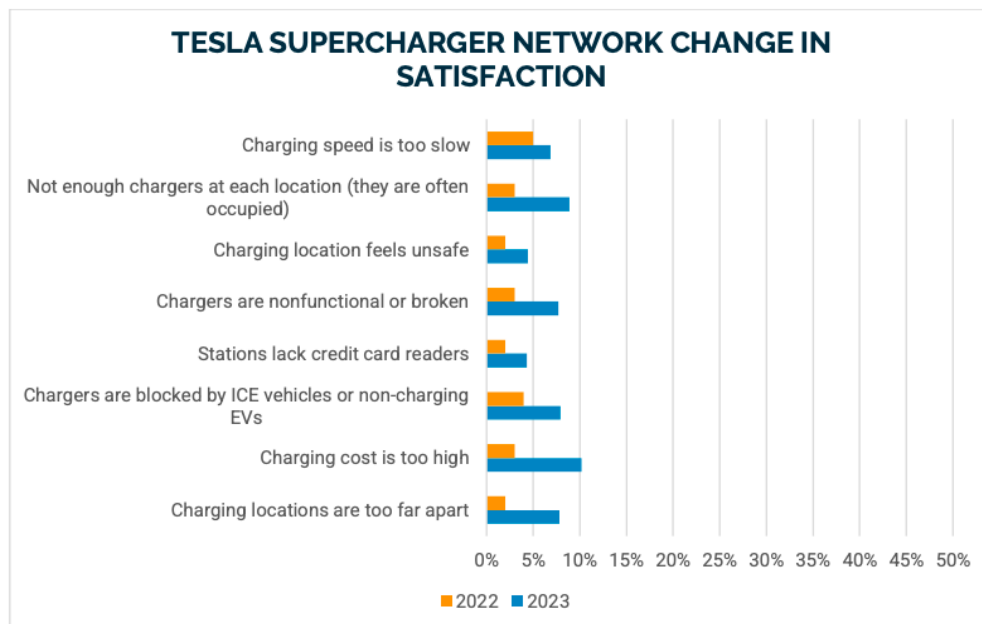


Figure 16: Tesla Supercharger Network Change in Satisfaction

Note: The Tesla Supercharger Network is considered separately in our survey for several reasons. It is large enough to warrant such analysis (representing more than 40% of the ratings of fast-charger networks overall); it has a very different business model than the other networks; and, its satisfaction ratings are markedly higher than the public charging networks.