

DOCKETED	
Docket Number:	22-EVI-04
Project Title:	Electric Vehicle Charging Infrastructure Reliability
TN #:	256407
Document Title:	Tesla Comments CEC Data Reporting and Reliability Regulation
Description:	N/A
Filer:	System
Organization:	Tesla
Submitter Role:	Intervenor
Submission Date:	5/15/2024 3:36:48 PM
Docketed Date:	5/15/2024

*Comment Received From: Tesla
Submitted On: 5/15/2024
Docket Number: 22-EVI-04*

Tesla Comments CEC Data Reporting and Reliability Regulation

Additional submitted attachment is included below.

May 15, 2024

Docket No: 22-EVI-04
California Energy Commission
715 P Street
Sacramento, CA 95814

RE: Comments on Second Draft Staff Regulations for Improved Inventory, Utilization, and Reliability Reporting

Dear Energy Commission Staff,

Tesla appreciates the opportunity to provide feedback in response to the Revised Proposed Regulations for Tracking and Improving Reliability of California's EV Chargers released on April 9, 2024. We appreciate efforts by CEC staff to establish clear reliability standards and assess current needs of California's electric vehicle (EV) charging ecosystem. Tesla participated in previous workshops and submitted comments in October 2023 regarding the proposed reliability requirements.¹

The quick pace of EV adoption in California necessitates reliability standards that will ensure public funding is used effectively to deploy charging infrastructure to best support EV drivers. Given the nascency and complexity of the EV charging industry, it is critically important for the CEC to incorporate feedback provided by charging providers to ensure regulations are feasible, actionable, and result in improved EV charging experience. Data reporting requirements must have a clear nexus to plans to improve EV charging station reliability. As such, the CEC should consider several factors when finalizing reliability and data reporting requirements including, consistency across state and federal program requirements, reducing the administrative burden on charging operators for unique reporting requirements, site-level redundancy, and field validation of new performance metrics.

I. Utilization data reporting requirements outside of public funding programs should be removed.

As charger utilization data is commercially sensitive and highly valuable business information, its reporting should only be mandated as part of a public funding program. For example, this data could reveal peak usage times, patterns of driver behavior, network expansion plans, or other insights that could be exploited by competitors or bad actors. For privately funded EV charging stations, the CEC's automatic designation of utilization data as confidential is insufficient to safeguard it from public records requests or potential disclosure under the confidentiality exclusions outlined in 2507(f)(1)(D). Given the inherent sensitivity to customers and business operations, we emphasize that this data should not be shared at any level of aggregation outside of public funding programs.

Additionally, the CEC's request for charger utilization data represents a departure from the requirements in the National Electric Vehicle Infrastructure (NEVI) Formula Program, other public funding programs, or state regulations. Quarterly reporting of charger utilization is an onerous task that will require the creation of new systems for data collection and reporting, adding a significant operational overhead for charging providers. Importantly, utilization data has limited practicality for informing network-level infrastructure forecasts or identifying sites that are underperforming for reliability purposes. Analyzing raw utilization data without network and business specific context could result in inappropriate infrastructure projection assumptions and operational conclusions. As mentioned in Tesla's previous comments in October 2023, a charging site with low utilization does not necessarily mean additional EV charging stations nearby are not needed, and conversely an EV charging station

¹ Tesla Comments on Data Reporting and Reliability Regulations, October 25, 2023. Available in docket no. 22-EVI-04.

with high utilization might not necessarily signal that more EV charging nearby is necessary.² As such, we dispute the rationale that utilization data from privately funded stations is required for the CEC to perform accurate forecasting of charging needs. Existing assessment tools, such as the second Assembly Bill (AB) 2127 Electric Vehicle Charging Infrastructure Assessment, are already adequately forecasting current and future charging needs. Given the limited usefulness of utilization data as a resource for the CEC in forecasting future needs, the proposed requirement would come at a high cost to network operators of privately funded charging infrastructure.

Furthermore, it is unclear if the CEC has the statutory authority to require utilization data reporting from privately funded chargers. AB 2061 recognized the limits to the CEC's authority and directed the CEC to establish standards that only apply to EV chargers and charging stations that received an incentive from a state agency or through a charge on ratepayers.³ Consequently, the current request appears to exceed the CEC's expressed statutory mandate directed in AB 2061.

II. Flexibility is necessary in the use of Open Charge Point Protocol (OCPP) to calculate uptime.

Charging providers should have the flexibility to maintain unique user interfaces as an alternative to being required to use OCPP as the basis for calculating uptime. As mentioned in Tesla's previous comments in October 2023, charging providers should not be compelled to make investments in Central Management System software compatible with OCPP messaging.⁴ Maintaining multiple connections to different backend endpoints for the same purpose is inefficient and could be avoided if charging providers had the autonomy to choose alternative systems. As long as there is alignment on the uptime calculation and that figure is received by the CEC, the system or method of providing the data should not be mandated.

III. The multifamily threshold should be revised to a number of chargers or aligned with CALGreen.

The CEC's proposal to exempt multifamily developments with four or fewer dwellings from reporting requirements is arbitrary, fails to consider the complexity of the EV industry's ownership and operational structures, and imposes a burden on small multifamily site hosts. It is unclear how a small multifamily complex with as few as five dwelling units and a single, non-networked EV charger, could feasibly comply with the regulation in its current form, or if the data's utility would exceed the cost of reporting and enforcement. While the CEC landed at the threshold through guidance set in AB 2061, which maintains that "uptime recordkeeping and reporting standards shall not apply to charging stations installed at residential real property containing four or fewer dwelling units"⁵, we believe AB 2061 does not preclude the CEC from setting a different applicability threshold for multifamily dwellings if deemed more appropriate. Instead of the threshold being set at the number of units, it would result in more actionable data and reduce compliance costs if the threshold was set at the number of chargers. For example, the applicability threshold could be set if a multifamily building has more than four chargers, meaning it could apply to a 20 unit building with five chargers or a five unit building with five chargers. Alternatively, the threshold could align with the California Green Building Standards Code (CALGreen, Title 24, Part 11)⁶ threshold for multifamily buildings, which is set at twenty-five units.⁶ Setting the threshold either based on the number of chargers or aligning with CALGreen would reduce the burden on small multifamily properties and result in more actionable data reporting.

IV. Uptime data should only be required and reported publicly at the site level.

² Tesla Comments on Data Reporting and Reliability Regulations, October 25, 2023. Available in docket no. 22-EVI-04

³ [AB 2061](#) (Ting, Chapter 345, Statutes of 2022)

⁴ Tesla Comments on Data Reporting and Reliability Regulations, October 25, 2023. Available in docket no. 22-EVI-04.

⁵ [AB 2061](#) (Ting, Chapter 345, Statutes of 2022)

⁶ [CALGreen, Title 24, Part 11.](#)

Tesla shared detailed feedback in response to the CEC's EV Charging Infrastructure Reliability workshop in November 2022 and in previous comments in October 2023 about the value of aggregating per-port uptime.⁷ It is important to reiterate that tracking and sharing uptime at individual ports is not representative of the true user experience at a charging station due to larger sites having inherent redundancies. For example, a customer's experience of reliability at a charging station with a single port down is very different if they are at a site with 1 port or a site with twenty ports. We continue to recommend that uptime at a port level should not be disclosed publicly or used to measure customer experience of reliability as it is less valuable or accurate in this format. We recommend the CEC modify the draft regulation to move from uptime measurements at the per port level to the site level. If this is not modified, the CEC should at minimum ensure that per-port uptime is not shared publicly.

V. Successful charge attempt rate (SCAR) calculation should align with ChargeX and must complete field validation.

Tesla cautions against adopting different and untested definitions of a successful charge attempt as a key performance indicator. The ChargeX Consortium is actively formulating and testing an alternative SCAR metric along with other metrics, and the CEC should defer to the results of this effort to inform the calculation in this proposed regulation. Should the ChargeX schedule lag behind the CEC's anticipated completion of the proposed regulation, the CEC should consider providing flexibility for the results of the ChargeX research to be incorporated after the regulation is finalized. Notably, as was previously detailed, Tesla firmly believes that uptime and other metrics to evaluate reliability should be measured and reported at a site level instead of at the port level. This level of aggregation is particularly important as any metric determined, whether it be uptime or SCAR, will be unable to fully account or capture data on all issues, edge cases, or potential failure points that exist. As such, aggregation of these metrics across a site should provide a more accurate view of charging experience.

Furthermore, the CEC's proposed criterion of a successful charge lasting for five minutes or more appears to be an arbitrary cutoff. There are successful charging sessions that last fewer than 5 minutes. Beyond the challenge of accurately incorporating or excluding these edge cases, Tesla is concerned with setting random limits in this regulation. It is also important to evaluate whether a minimum kWh amount should be used instead of a minimum number of minutes. The CEC should instead consider the final findings of the ChargeX research, which will be field tested and finalized through a robust technical stakeholder process. Importantly, field testing of the feasibility and utility of the SCAR calculation is necessary prior to a mandate to ensure that the outcomes are appropriately evaluated for accuracy and usefulness.

VI. Clarity should be provided on the API framework that will be utilized for data reporting.

As detailed in previous comments, the CEC must provide clarity on the proposed Application Programming Interface (API) that will be used to transfer required data to the CEC. Tesla requests that the CEC offer an opportunity to provide comments on draft API requirements before they are mandated. Additionally, the CEC should provide charging providers with sufficient software flexibility and time to implement any unique API requirements, as developing a new interface will be time and resource intensive.

Tesla appreciates the opportunity to provide feedback on the CEC's proposed regulations for improved inventory, utilization, and reliability reporting. We appreciate the CEC's continued efforts to improve the quantity and quality of charging infrastructure in California, and we look forward to engaging on the finalization and implementation of this regulation going forward.

Sincerely,

⁷ Tesla Comments on EV Charging Infrastructure Reliability Workshop, November 14, 2022. Available in docket no. 22-EVI-04

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