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Tesla Comments Data Reporting and Reliability Regulations

Additional submitted attachment is included below.

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October 25, 2023

Docket No: 22-EVI-04

California Energy Commission
715 P Street
Sacramento, CA 95814

RE: Comments on 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 California Energy Commission's (CEC) draft staff report *Tracking California's Electric Vehicle Chargers: Regulations for Improved Inventory, Utilization, and Reliability Reporting.* We commend the consistent efforts by CEC staff over the last two years to gather data to better assess the quality and quantity of California's electric vehicle (EV) charging infrastructure. Tesla has been an active participant in the CEC's reliability workshops and previously submitted comments in November 2022 regarding the proposed reliability requirements. In addition to these comments, Tesla is also a signatory of an EV charging industry letter[1] providing comments in response to the CEC's draft regulations.

Establishing clear reliability standards for publicly funded EV charging infrastructure is critically important to ensure public funding is efficiently used to deploy stations that can be reliably utilized by EV drivers. A number of factors should be considered when developing reliability requirements and an appropriate uptime formula. These factors include consistency across state and federal program requirements, site-level redundancy, clear definitions of "up" and "operational", field monitoring as appropriate, and standardized site-level agreement language. Tesla provides the below comments in response to the CEC's draft regulations.

I. The charger utilization reporting requirements outlined in § 3123 (2)(K) should be removed.

The CEC's request for collecting charger utilization data for all public charging stations, regardless of whether they are receiving public funding, is unnecessary and excessive given the limited practicality and usefulness of such data in informing infrastructure forecasts. The draft report indicates that "accurate information about charger utilization is a necessary input for the CEC's modeling of California's EV infrastructure needs." As articulated further by the EV charging industry letter, Tesla believes that charger utilization data on its own will offer limited insight into the broader infrastructure forecast. For example, an EV charging station with low utilization does not necessarily mean additional EV charging stations nearby are not needed or valuable to current and future EV drivers. Similarly, an EV charging station with high utilization might not necessarily mean more EV charging nearby is necessary or most valuable to EV drivers. Additionally, the CEC's existing charging needs assessment tools are already adequately forecasting current and future charging needs, such as via the second Assembly Bill (AB) 2127 Electric Vehicle Charging Infrastructure Assessment.

Importantly, it is unclear if the CEC has the statutory authority to compel operators of privately funded charging stations to provide utilization data on its entire charging network. Consequently, there is little rationale for imposing additional utilization reporting requirements, as they may offer only marginal additional value to the CEC's overall infrastructure forecasting, could result in inappropriate infrastructure projection assumptions, and come at a high cost to network operators of privately funded charging infrastructure.

II. Charger utilization data is business sensitive and should not be reported outside of public funding programs.

Charger utilization data is confidential and commercially sensitive. While Tesla appreciates the CEC's designation of utilization data as confidential, we must emphasize the inherent sensitivity of collecting such information to both

[1] EV Charging Industry Letter, October 25, 2023. Available in docket no. 22-EVI-04.

our customers and our business operations. As a public agency, any data received by the CEC is at risk of being made public through public records requests. Tesla reiterates that this data should not be shared in any level of aggregation publicly or outside of public funding programs. Therefore, the exclusions to confidentiality outlined in 2507(f)(1)(D) should be removed before adopting the final regulations.

III. The definitions of "up" versus "down" in the CEC's uptime formula must be revisited.

Tesla provided detailed feedback on uptime formulas in a previous letter in response to the Electric Vehicle Charging Infrastructure Reliability workshop that the CEC hosted on October 21, 2022.[2] The key points from this letter are still applicable to these proposed regulations. The information below will touch on sections of the proposed regulation related to uptime.

a. Downtime for Networked Chargers: § 3124 (c)(1)(C)

The time between a BootNotificationResponse and StatusNotificationRequest is a better indicator of downtime than the time between a BootNotificationResponse to the last HeartbeatResponse. We seek additional explanation from the CEC on the reason why the latter mechanism was proposed prior to its adoption in the final regulation.

b. Downtime for Networked Chargers: § 3124 (c)(1)(D)

The CEC defines a downtime period as "the time between the earliest record that a charger is not capable of successfully dispensing electricity *or otherwise not functioning as designed* and the time it is available to deliver a charge." This threshold is likely too broad and could be interpreted as imposing a nameplate requirement, which is far stricter than the requirements in NEVI. The CEC should clarify the threshold at which a charger is "functioning as designed" and whether there is a specific minimum power level that should be associated with this.

Furthermore, the CEC explains that "the first record that a charger is not capable of successfully dispensing electricity or otherwise not functioning as designed includes, but is not limited to, consumer notification, internal diagnostics, or inspection, whichever is earliest." Using customer notifications to trigger downtime has significant operational challenges. Charging providers would need to synchronize every customer complaint with the rest of the available data and determine if it is a new, active, or already resolved issue. Providing customer notification data may be appropriate, but this data should not be used to start the clock on outages.

c. Downtime Nonnetworked Chargers: § 3124 (c)(2)

The CEC describes downtime for nonnetworked chargers as "the time that a charging port is in an inoperative state or not capable of successfully dispensing electricity." The meaning and parameters of inoperative state in this definition is vague and needs additional clarity. Specifically, the CEC should consider whether charging providers would have the flexibility to define "inoperative state" using the framework provided in the definition of downtime as "not capable of dispensing electricity or otherwise not functioning as designed."

IV. Flexibility is necessary on the proposed additional requirements for networked chargers: § 3125 (a).

While Open Charge Point Protocol (OCPP) is essential for ensuring interoperability and being an OCPP capable charger is either already or is becoming a requirement for receiving CEC funding in the future, it is equally important to grant charging providers the flexibility to maintain unique user interfaces as appropriate. If a charging operator has developed a different interface for their charging stations, it is still possible for the charger to seamlessly adapt to it when a user switches providers. Rather than mandating charging providers base their uptime on OCPP messages and invest in Central Management System software, charging providers should be provided with a choice. The inefficiencies that come with maintaining multiple connections to different backend endpoints for the same purpose are a concern. The goal should be to balance the need for interoperability with the desire for charging providers to have autonomy and efficiency in their operations.

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

V. Uptime data should be aggregated and only shared publicly at site level.

Uptime data that is calculated per charging port should not be disclosed publicly. In Tesla's previous letter in response to the CEC's EV Charging Infrastructure Reliability workshop, we recommended that uptime be reported at a site level, as tracking and sharing uptime at individual posts is not representative of the true user experience at a charging station. In particular, it does not account for larger sites that have inherent redundancy built in. This recommendation stands, and we continue to recommend that even if the CEC tracks uptime at a port level to be consistent with NEVI, that this data is not disclosed publicly as it is less valuable in this format.

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

Throughout the proposed regulation there is reference to utilizing an Application Programming Interface (API) of the Commission's choosing in order to transfer required data to the CEC. There is no detail however on what the requirements will be for this API and whether existing API integrations built for NEVI or the AFDC database could be utilized. Depending on the features, developing a new interface may be time intensive. There should be an opportunity to provide comments on the draft API requirements.

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

Sincerely,

Francesca Wahl
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Business Development and Public Policy
Tesla, Inc.