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FLO EV Charging Comments on the CEC's Draft EVSE Reliability Regulation

Additional submitted attachment is included below.

October 25, 2023

Mr. Dustin Schell
Mr. Ralph Lee
Mr. Michael Dioha
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814
Docket: 22-EVI-04

Re: FLO EV Charging Comments on CEC's Proposed Regulatory Framework for EVSE Reliability

Founded in 2009, FLO EV Charging ("FLO") is a leading North American EV charging station manufacturer and network operator. We fight climate change by accelerating EV adoption through a vertically integrated business model and delivering EV drivers the most dependable charging experience, from curbside to countryside. Every month, we enable more than 1,500,000 charging events thanks to over 100,000 DC fast and level 2 EV charging stations deployed at public, private and residential locations. FLO operates across North America and our high-quality charging stations are assembled with care in Michigan and Quebec.

FLO was proud to be one of the sponsors for Assembly Bill 2061 (Ting, 2022) and commends the Commission for publishing its draft regulation. Overall, we believe the draft regulation sets a strong foundation that honors the intent and spirit of the legislation. Below, FLO offers recommendations to not only strengthen the consumer protection aspects of the regulation, but to better protect companies' sensitive data, and to simplify and streamline some of the aspects of compliance and reporting. We recognize that balancing these interests is not always easy and appreciate the Commission's sensitivity to various perspectives. We look forward to continuing to partner with Commission to finalize this critical regulation.

EVSE Inventory Reporting Requirements

I. Work with the Air Resources Board to phase out its EVSE inventory reporting requirements to eliminate duplication.

As the Commission knows, the Air Resources Board (Board) already requires electric vehicle service providers (EVSPs) to report a variety of EVSE inventory data via its EVSE Standards Rule. These requirements overlap with the Commission's extensively, such as: charger address, geographic coordinates, charger ID, port ID, and number and types of plugs, to name a few[1]. Duplicative reporting requirements create both administrative burden and complexity for EVSPs. This complicates our

[1] EVSE Att A - Final Reg. Order (ca.gov). Pages A-9 and A-10.

operations and increases costs in the state without providing a clear public benefit (i.e. why does this information need to be reported twice?).

Given that the Legislature transferred Health and Safety Code Section 44268 authority to the Commission this year[2], the Commission should be the lead entity collecting this information. It is imperative that the Commission prioritize working with the Board to phase out its EVSE inventory reporting requirements, otherwise the Commission's proposed requirements only create more burden for EVSPs.

II. Limit reporting of EVSE utilization data to publicly funded chargers only.

EVSE utilization data has immense financial and competitive value for EVSPs – it informs our deployment strategies and guides how we work with existing and new customers alike to provide charging solutions that fit their priorities. For example, in partnership with New York City Department of Transportation (NYC DOT), FLO deployed 100 curbside chargers across the five boroughs. In the first 18 months of this pilot project, overall utilization of the network reached 34% in December 2022 (defined as the amount of time a charger was plugged in to an EV[3]. The amount of time EVs were actively charging while plugged in at these locations was 81% with the median charging session length being just over three hours[4].

NYC DOT is leveraging this valuable data to draw important conclusions – first, that the pilot project was a success, and they may deploy more curbside chargers across the City; second, that while utilization may be initially low in the first months of deployment, it will gradually increase over time, exemplifying the mantra of "if you build it, they will come".

Under the above NYC DOT example, data sharing was reasonable because this pilot project was partially funded by NYC DOT and evaluating the project was an important goal, thus requiring data collecting and publication. We recognize the Commission may have similar goals with collecting utilization data, but, if the project did not receive public funds, we do not think it is reasonable to require utilization data reporting. Broadly collecting utilization data for all EV charging projects, regardless of whether they were publicly funded, risks undermining each EVSP's investment case in deploying more charging stations. To better strike a balance between commercial sensitivity and the Commission's interests, we strongly encourage the Commission to limit this reporting requirement to publicly funded chargers only.

III. Eliminate the ability to disclose data (1) aggregated by individual charging network providers (2) any aggregated utilization data and (3) the sum of all charging network providers data aggregated at the census tract level.

For the same reasons as recommendation II, FLO strongly encourages the Commission to remove the provision allowing it to disclose any data aggregated in various ways. Disclosing such commercially sensitive data does not provide a public benefit that outweighs the cost and negative impact to EVSPs. No

[2] Bill Text - SB-123 Energy. (ca.gov)

[3] New York Department of Transportation. NYC DOT Curbside Level 2 EV Charging Pilot: Evaluation Report. Pages 22-24. May 2023.

[4] *Id.*

individual charging network should be identifiable by any measure save for perhaps the number of chargers it has installed in the state and whether those chargers are public or private. Other types of data, such as utilization, the year(s) they were installed, and customer segments can be extremely revealing as to the company's market position and what its business strategy might entail.

For example, if the Commission publishes how many chargers an EVSP has installed in the state by year and customer segment and their respective utilization data, its competitors can discern sensitive intel such as (1) how active the EVSP is in the state, (2) where they are active, (3) the types of customers they have been successful with (or not), and (4) the economics of the project(s) (via utilization data). Companies can use this information to target their marketing campaigns, sales strategies and tactics, and perhaps even product development plans. Many studies have underlined the challenging economics for EV charging station investments at this stage of EV adoption. Publishing utilization data undermines competition and increases companies' risk when investing in new stations – companies have spent significant time and capital to penetrate various market segments in California; if other companies get broad access to this kind of data, those companies can leverage it to compete without having spent the same time and resources to obtain that valuable market knowledge, which raises the risk that any station that starts meeting expected return thresholds will be quickly and inappropriately met with one or more competing sites that undermine the financial model that justified investment.

These very real risks greatly outweigh any perceived public benefit of publishing this data. Due to these same sensitivities, FLO also recommends removing the provision to disclose data at the census tract level, by year, and by customer sectors, even if it is the sum of all charging network providers' data. Therefore, FLO suggests the following amendments below for the Commission's consideration.

Suggested amendments:

(D) Confidential data provided pursuant to section 3123(b)(2)(K) or (b)(3)(B)(1) through (b)(3)(B)(3), or section 3125(b)(4), of Article 2 of Chapter 12 may be disclosed in the following manner:

1. For an individual charging network provider or charging station operator, the total number of chargers it has deployed in the state and the total amount of chargers that are public and private. ~~data aggregated at the county or census tract level by year and customer sectors.~~

2. For the sum of all charging network providers or charging station operators, data aggregated at the county level, except utilization data ~~or census tract level by year and customer sectors~~.

Uptime Requirements

IV. Mandate each publicly funded charging port meet 97 percent uptime for a minimum of five years.

We strongly encourage the Commission to mandate this uptime performance requirement across all the state's EVSE incentive programs to both protect consumers and maximize the return on investment of taxpayer funds. As one of the sponsors of Assembly Bill 2061 (Ting, 2023), FLO envisioned it as a critical

consumer protection policy. When chargers are broken, the state risks drivers being frustrated at best, and at worst, it risks stranding drivers when they need to charge their EV. Neither scenario helps increase consumer interest in EVs and in some cases likely reduces interest altogether. For the state to reach its EV and charger deployment goals, and for these technologies to become truly mainstream, they must be exceptionally dependable.

While the Commission's draft uptime reporting and recordkeeping requirements serve as an important foundation to increase everyone's collective understanding of charger uptime and the reasons for downtime, they do not protect consumers from broken chargers. Without any uptime performance requirements, the state continues to risk spending hundreds of millions of taxpayer funds on EV chargers that are not reliable when drivers need them.

With the signing of Assembly Bill 126 (Reyes, 2023), the Commission is required to "adopt tools to increase charging station uptime, including, but not limited to, uptime requirements…"[5]. Both the Federal Highway Administration and the Commission have already set an important precedent for uptime requirements – mandating 97% uptime per charging port in their respective funding programs. Other states have already adopted this same requirement or plan to via future funding programs. Considering the exclusions the Commission is proposing for the purposes of calculating uptime, achieving 97% uptime per port is feasible.

FLO agrees with the Commission's statement that the causes of poor charger reliability are not well understood and that setting a 97% uptime requirement may not perfectly ensure drivers are accessing reliable chargers. However, FLO does not believe this is a reason to not have an uptime performance requirement at all. FLO recommends setting an initial 97% requirement, and as the Commission's understanding of uptime improves over time, to revisit and refine this requirement as needed to reflect these findings.

V. Require EV charging networks to report whether they own each EVSE reported or if it is owned by a third party.

Whether an EVSE is owned by an EVSP or a third party can greatly affect its uptime. When owned by a third party, EVSPs must collaborate closely with that entity to service the chargers. In some cases, an EVSP may not be able to service a charger until the third party gives it explicit permission; in other cases, the EVSP may not be responsible for serving a charger because the third party has agreed to take on that responsibility themselves or they have not otherwise purchased any kind of operations & maintenance plan.

When reporting charger uptime, additionally reporting whether the EVSE is owned by the reporting entity or by a third party can provide useful insights into factors affecting charger uptime, good or bad (in addition to the downtime reporting requirements). Analysis of this data could help further inform the Commission's future funding agreements with recipients via operations and maintenance requirements.

[5] Bill Text - AB-126 Vehicular air pollution: Clean Transportation Program: vehicle registration and identification plate service fees: smog abatement fee: extension.

VI. Allow EV charging networks to exclude up to 10 days of downtime for each incident of vandalism.

Occurrences of vandalism are relatively common and unpredictable. In FLO's experience, the most common forms of vandalism include cut cables and cracked screens – both of which require relatively major repairs. FLO recognizes that the Commission does not want vandalism to be a loophole for chargers to be nonoperational for unacceptable lengths of time. However, limiting this exclusion to only five days per incident does not provide adequate flexibility to EVSPs that recognizes the real challenges of combatting vandalism. To balance these competing interests, FLO encourages the Commission to instead allow ten days of excludable downtime per incident.

Furthermore, FLO is skeptical that obtaining third party documentation for each vandalism event, especially a police report, will be practically feasible at scale. Such a requirement poses significant process complexities – FLO cannot control the speed with which the police provide such documents, if they are willing to provide them at all. To provide more practically implementable solution, FLO recommends that time-stamped photos of a vandalism event be an eligible type of documentation.

VII. Specify error codes EV charging networks must use to measure the total number of failed charging sessions more accurately.

The Commission's proposed requirement to report the number of failed charging sessions for the reporting period is ambiguous. Even with the definitions of "charge attempt" and "successful charging session", FLO believes the Commission will still receive inconsistent and potentially inaccurate data because companies will likely have various interpretations of what constitutes a failed charging session.

ChargeX, a national consortium comprised of national labs and industry, recently released a report titled, "Recommendations for Minimum Error Codes for Electric Vehicle Charging Infrastructure". The report specifies 26 types of error codes[6] – FLO recommends that the Commission use this list to specify how EVSPs report the number of failed charging sessions. Companies can see these error codes both via OCPP 1.6J and 2.0.1 – it is reasonable to assume that if an EVSE reports one of these error codes, it means the charging session failed. Specifying this initial list of error codes will ensure more consistency and accuracy of information to fulfill this requirement.

VIII. Give EV charging networks an opportunity to provide feedback on data reporting and API templates or formats.

By providing EVSPs an opportunity to review data reporting and API templates and formats, we can help the Commission avoid duplication, align with other jurisdictions requiring similar reporting, minimize the risk of mistakes, and increase cost efficiencies for EVSPs.

[6] ChargeX Consortium. Recommendations for Minimum Error Codes for Electric Vehicle Charging Infrastructure. Pages 4-5. September 2023. <ChargeX_MREC_Rev5_09.12.23.pdf (inl.gov)>.

IX. Give EVSPs six months to comply with the regulation following the final date of adoption.

Giving EVSPs six months to comply with the adopted regulation will allow them to update their internal processes, communicate with customers that are in the process of installing one or more charging stations, and ensure full compliance. EVSPs need time to collect the data and build the internal reporting systems to be able to share with the Commission. This will balance the need for regulatory compliance with the practicalities of real-world adjustments.

Thank you for your consideration,

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