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FLO Comments on CEC AB 2127 Report

Additional submitted attachment is included below.

February 26, 2021

Ms. Thanh Lopez
Ms. Tiffany Hoang
Mr. Alan Jenn
Mr. Noel Crisostomo
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Re: FLO Comments on the CEC's AB 2127 Infrastructure Assessment Report

Dear Ms. Lopez, Ms. Hoang, Mr. Jenn, and Mr. Crisostomo,

Thank you for the opportunity to comment on the Energy Commission's (CEC) AB 2127 Infrastructure Assessment Report (Report), as we recognize it as a critical tool to set the direction of CEC activities in further scaling up the zero-emission vehicle (ZEV) infrastructure market.

FLO is a leading North American charging network for electric vehicles (EV) and a major provider of smart charging software and equipment. FLO offers public, commercial, and residential chargers, including Level 2 EV supply equipment (EVSE) and DC fast chargers (DCFC). In North America, FLO has deployed over 35,000 charging stations and manages approximately 500,000 unique charging experiences that transfer 5.5 GWH of energy monthly. FLO's headquarters and network operations are based in Québec City.

FLO offers the following comments for the Commission's consideration:

1. **We encourage the Commission to begin tracking reliability of charging stations and evaluate if there are disparities in charger uptime across demographics identified via its SB 1000 study.**

We applaud the CEC's release of the SB 1000 study, as well as its additional modeling work with EVI-PRO 2, HEVI-LOAD, EVI-RoadTrip, and WIRED. FLO agrees these analyses are critical to understanding both scale-up needs to serve California's growing ZEV population and any disparities across demographics in the deployment of infrastructure.

FLO strongly believes now that California has established an initial foundation of charging stations across the state, it's critical to ensure high reliability of those stations. Increasing consumer confidence in EVs as accessible and convenient greatly depends on the convenience and reliability of accessing charging stations. Bad charging experiences due to a charger being offline can greatly undermine the state's ZEV market adoption goals.

In recognition of this, California's Zero-Emission Vehicle Market Development Strategy calls out reliability of charging stations as a primary responsibility of the Energy Commission, utilities,

and charging networks[1]. It also suggests tracking "charging system resilience" as a key metric to evaluate the success of ZEV infrastructure scale-up[2].

As the CEC begins conducting its next iteration of data modeling for charging stations, FLO encourages staff to monitor the reliability of charging stations in support of the state's ZEV Market Development Framework. In furtherance of the CEC's SB 1000 work, FLO also encourages staff to track if there are disparities in reliability based on the demographics outlined in its initial report, as it could help inform the equitable accessibility of charging stations beyond just their equitable deployment. Together, this data would be a powerful tool to inform the quality of the state's infrastructure from an EV drivers' perspective and help ensure drivers have a consistent and high-quality charging experience across networks and regions of the state.

If the CEC is interested, FLO would be happy to meet with staff to discuss ideas on how to track and measure reliability, including information sharing of some of our own network's reliability data.

2. **We support the Commission piloting additional funding mechanisms to leverage additional private investment in charging and increase scale-up of infrastructure.**

FLO supports the CEC's investigation of piloting new funding mechanisms to maximize the deployment of chargers while reducing overall costs. Focusing on this metric as a type of "target" creates incentive for companies to continue prioritizing innovation and competition in the marketplace, which will only further serve the state's goals to bring costs down for charging.

Given the complexities of operationalizing this "target" through various funding mechanisms, FLO also respectfully encourages the CEC to hold technical workshops to explain the design of these mechanisms, showcase examples of how they work, and provide support to electric vehicle service providers to ensure they understand how to participate in them.

Specifically, regarding the concept of loans, FLO would underscore that access to capital for loans has not been an issue in our experience. Furthermore, depending on how the CEC constructs a loan program, it could unintentionally skew deployment of charging stations to higher income areas. Companies are typically risk averse, and profit margins for selling or operating charging stations are currently low; therefore, companies may avoid risking using loans to deploy chargers in areas that have lower utilization and thus result in lower revenues. **Given this, FLO would encourage the CEC to consider requiring repayment of loans only if the charger is profitable, so as to minimize potentially skewed deployment**.

3. **We encourage the Commission to develop additional tools beyond financing mechanisms to support charging deployment.**

Unexpected permitting and interconnection delays of charging stations is commonplace, and these delays have iterative impacts for charging providers resulting in higher costs and lost opportunities to deploy stations. Five years have passed since the passage of AB 1236 (Chiu, 2015), yet 260 local jurisdictions still have yet to streamline their permitting processes,

[1] Governor's Office of Business & Economic Development. *California Zero-Emission Vehicle Market Development Strategy*. Pages 51, 78, and 79. February 2021.
[2] Governor's Office of Business & Economic Development. *California Zero-Emission Vehicle Market Development Strategy*. Page 17. February 2021.

according to the Governor's Office of Business & Economic Development[3]. FLO recognizes that this is likely in part due to lack of technical capacity, staff and other resources to take on this effort, which is an especially acute issue for both smaller and rural cities. Given this, FLO encourages the CEC to develop an online portal of standardized forms and tools to help these jurisdictions and utilities streamline their processes and timelines for charging stations.

4. **We encourage the CEC to assess if CALeVIP program design changes are needed to better support TNC electrification.**

Given the passage of SB 1014 (Skinner, 2018), the state has solidified TNC electrification as a priority. Because the TNC market has increased drastically over the years, electrifying this market segments provides an immense opportunity to further help the scale-up and therefore overall cost reduction of charging stations. FLO appreciates the CEC's partnership with the UC Davis Institute of Transportation Studies to better understand this opportunity, and given the results of its study, FLO sees this as an opportunity for the CEC to assess if CALeVIP program design parameters appropriately serve this market. For example, CALeVIP currently requires all funded DCFCs to be accessible by the public 24/7. However, many downtown cores, where TNCs typically operate, lack locations that can fulfill this requirement. This requirement or others may no longer be appropriate, if the CEC concludes that is overly restricts the opportunity to deploy DCFCs that support TNC electrification.

5. **We support creating a forum for information sharing among key industry groups on the implementation status of ISO15118.**

FLO appreciates the CEC's analysis of the status of ISO15118. As the CEC prioritizes implementation of this standard, it should ensure the industry fully understands which version and parts of ISO15118 will be implemented and on what timeline. Implementation of ISO15118 cannot be accomplished by charging providers alone. OEMs and utilities have a key role in finalizing and implementing this protocol, and yet the status and timeline for its incorporation is extremely unclear. If charging providers are to successfully incorporate ISO15118 into their EVSE product lines, they need significantly more information from OEMs and utilities on whether they are implementing all or parts of ISO15118, and the timeline for implementation. Charging providers at least one to two years to incorporate new protocols and standards into their product roadmaps.

Thank you for your consideration,

[Electronically submitted]

Cory Bullis
Senior Public Affairs Specialist – U.S.
FLO

[3] Governor's Office of Business & Economic Development. *ZEV Permitting Olympics*. Date Accessed February 17, 2021. <ZEV Permitting Olympics | California Governor's Office of Business and Economic Development>.