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FLO Comments on LDEV Infrastructure Allocations

Additional submitted attachment is included below.

December 14, 2021

California Energy Commission
Fuels and Transportation Division
1516 Ninth Street
Sacramento, CA 95814
Docket: 20-TRAN-04

Re: FLO Comments on Light-Duty Electric Vehicle Infrastructure Allocation Workshop

FLO appreciates the opportunity to comment on the Energy Commission's (Commission) Light-Duty Electric Vehicle Infrastructure Allocation Workshop. The Commission's planned investments in charging are critical to piloting and scaling various charging solutions – and providing invaluable lessons learned to stakeholders that can lead to further charging deployment and EV adoption.

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 and DC fast chargers. In North America, FLO has deployed over 50,000 charging stations and manages hundreds of thousands of unique charging experiences that transfer 5.5 GWH of energy monthly. FLO's headquarters and network operations are based in Quebec City.

I. We strongly support dedicated curbside charging programs (grants and rebates) for local governments and utilities.

Curbside charging stations are located on-street in the public right-of-way, providing 24/7 access to drivers. They can be Level 2 or direct current fast chargers, and deployment applications are often customizable, especially for Level 2 stations. As more fully discussed below, they are a critical tool that can serve many of the Commission's and state's transportation electrification goals, including (1) increasing access to home charging for residents at multi-family housing, (2) supporting ride-sharing electrification, (3) helping more evenly distribute charging infrastructure as called for via SB 1000 (Lara, 2018), and (4) helping get chargers in harder to serve areas.

Multi-family housing. Currently, 31 percent of Californians reside in multi-family housing[1]. The Commission itself has estimated that the multi-family housing complexes will need over 140,000 chargers by 2025, nearly 330,000 by 2030, and over 500,000 by

[1] California Department of Housing & Community Development. *California's Housing Future: Challenges & Opportunities*. Feb. 2018. Page 15.

2035[2]. While FLO strongly supports policies that enable the deployment of on-site chargers to serve this housing stock, it will be critical to offer other options as well. Some buildings face significant barriers prohibiting installation of EV charging stations that the Commission is well familiar with – costly infrastructure upgrades, building owners or property managers not being properly incentivized to install charging, lack of on-site parking or renters' lack of access to dedicated parking spots. If these barriers prove to be insurmountable, cities and utilities can offer curbside chargers adjacent to these complexes; this provides a dual benefit of both serving these residents and members of the public, maximizing the value of these investments.

Ride-sharing electrification. California's Clean Miles Standard (authorized by SB 1014, 2018) requires transportation network companies, predominantly Uber and Lyft, to transition their vehicle supply's vehicle miles traveled to 90 percent zero-emission by 2030. SB 1014 specifies further that the state must ensure "minimal negative impact" to drivers[3].

Achieving SB 1014's vehicle electrification requirements will require significant publicly available infrastructure – both DCFCs and Level 2 stations. The average Uber or Lyft driver will likely have trouble accessing appropriate charging. Studies indicate that these drivers are typically lower income and live at multi-family housing, undermining their ability to access chargers. To minimize the negative cost impacts (and consumer frustration from lack of available charging), the Commission has an opportunity to help cities and utilities deploy curbside solutions to help accelerate drivers' access to EVs. This has an underlying equity benefit of helping serve low-income households.

Equitably Distributing Chargers to Serve Harder-to-Reach Areas. SB 1000 (Lara, 2018) requires the Commission to equitably distribute chargers across the state. We applaud the Commission's success to date fulfilling this requirement, but, as the Commission knows, given our statewide infrastructure deployment needs, there are acute infrastructure gaps in several areas – downtown cores, multi-family housing, and airports, to name a few (rural and low-income communities also suffer from charging deserts). Given the lack of or high cost of available private real estate for station deployment in many of these areas, curbside charging can be a solution to get chargers in publicly owned rights-of-way in areas that otherwise wouldn't be able to deploy stations, or where doing so would be very expensive. This helps to spread the benefits of publicly available stations more evenly, while also increasing charger visibility to drivers, increasing consumer confidence in the availability of public infrastructure.

Given the enormous potential for benefits, we respectfully encourage the Commission to continue funding curbside charging projects in the following ways:

Rebates to cities. Several cities are considering deploying curbside chargers or are interested in procuring more, however, they lack a budget to do so. For more

[2] California Energy Commission. AB 2127 EV Charging Infrastructure Assessment. July 2021. Pages C-13, C-18, and C-25.
[3] Senate Bill 1014. 2018. Public Utilities Code Section 5450 (d)(1).

standardized curbside charging solutions that have predictable cost structures, we respectfully encourage the Commission to develop a dedicated rebate program, either as a subsidiary to CALeVIP 2.0 or as a stand-alone program, to allow cities to quickly access funding to deploy curbside solutions. Offering a rebate solution can be critical, as many cities also lack the appropriate resources to pursue more complex grants. Furthermore, some curbside charging solutions have become more standardized in their cost structures, which makes it easier for a rebate program to decide on an appropriate incentive level.

Grants to continue curbside innovation through BESTFIT 2. FLO is proud to implement curbside charging applications via the Commission's first round of BESTFIT grant funding regarding existing utility infrastructure; we are very hopeful this will yield significant insights on how to standardize station deployment attached to existing utility assets. However, this pilot project is small in scope, and conducted exclusively with Southern California Edison's infrastructure. Based on preliminary discussions with other utilities and municipalities, we believe it will be important to conduct additional pilots to see if the results of this project are replicable or if it elicits insights on additional challenges, opportunities, and lessons learned. Analyzing the data from this pilot will likely take a couple years, and we believe it is worthwhile to begin funding concurrent pilot projects to accelerate the timeline for gathering lessons learned with other utilities and types of existing infrastructure.

Fund site selection and planning to get cities "curbside ready". As the Commission knows, deploying charging stations often requires extensive pre-planning, including site assessments, mapping out access to power, and analyzing additional data points. Together, these planning activities help inform the best locations to deploy stations to fulfill any number of goals – ensuring high utilization, providing equitable access, or perhaps minimizing installation costs, to name a few. For example, the City of San Francisco conducted a 2030 charging infrastructure needs analysis, which not only calculated a potential need for approximately 800 curbside charging stations, but also identified how many curbside chargers need to be deployed per zip code within the City's geographic boundaries[4]. This analysis provides a critical foundation to planning for curbside charging and serves as an important pre-cursor to the next stage of planning, which includes more specific site selection. Many cities have yet to conduct these kinds of analyses due to lack of resources. Should public funding become available – such as through the Commission, other state agencies, utilities, or the federal government – some cities could be at a disadvantage to submit applications because they have not done the pre-work necessary to determine the best sites to use. The Commission funding such work could be similar in nature to the "EV Blueprints" it has funded in the past, but more narrowly tailored.

[4] Chih-Wei Hsu et al. City charging infrastructure needs to reach 100% electric vehicles: The case of San Francisco. International Council on Clean Transportation. October 2020. Pages 6 and 18.

II. We strongly support dedicated rebates for local government fleet charging, but additional equity mechanisms should be included.

Cities are often at a disadvantage to pursue public funding opportunities because they have constraints other applicants might not – lack of resources and staffing continue to be important limiting factors for many. Developing programs dedicated to local governments could help their ability to access funds significantly. We support a rebate model, like CALeVIP, specifically for local governments to access on a first-come, first-served basis.

However, not all cities are a monolith, and some have more resources than others. To ensure more equitable access to any Commission funds, we also encourage the Commission to allow cities that meet specified criteria (in a disadvantaged or rural community, cities of a certain size, for instance), to be allowed more time to submit applications for rebates. We encourage the Commission to consider mechanisms like what it is contemplating in the design of EnergIIZE to account for more equitable access. Finally, public charging should be eligible in a local government rebate program; cities should not be precluded from procuring a specific kind of charging. Should a city want to deploy public chargers that can also serve its fleets, this maximizes the value of the Commission's investment by providing more public access to chargers and thus enabling higher utilization.

Finally, we do not believe a 50 percent match share is appropriate in most cases, as cities typically lack funding to procure charging stations in the first place. This is especially true for smaller cities or those residing in disadvantaged communities. FLO recommends the Commission consider a 70/30 cost share between the state and cities, with appropriate uptime requirements; this way, cities still have "skin in the game" to maintain their investments, but barriers to initial deployment are reduced.

III. We respectfully recommend the Commission de-prioritize DCFC corridor charging until federal funding is exhausted.

The Commission is aware the state, through the Department of Transportation (Caltrans), will receive approximately $380 million from the federal government to deploy corridor charging over five years. Given the number of competing needs to deploy chargers across the state, we encourage the Commission to prioritize providing technical support and assistance to Caltrans to administer these federal funds first in the short term before using any of its own funding for corridor charging. While there are likely additional gaps to fill along corridors that federal funding will not cover, it's critical for the Commission to work to address multiple EV charging use cases, especially those not being covered by other funding sources. FLO is committed to providing technical guidance and assistance to Caltrans to support roll out of these funds and is happy to also share this guidance with the Commission as well as it relates to corridor charging.

Finally, as the Commission considers prescribing power levels for DCFCs, FLO recommends it set a floor at 50 kW. While FLO recognizes and supports the value of

high-powered charging (e.g. 150 kW, 350 kW), we believe it's important to give charging companies and site hosts the flexibility to right size charging solutions. Companies consider many factors when choosing the right power level – driver use case, expected dwell time, cost, local electrical capacity, to name a few – if the Commission prescribes higher power levels, it could unintentionally exclude sites well suited for charging, but which can't or are unfit to support high-powered charging.

The Commission's work planning for additional funding projects is critical to filling gaps in infrastructure – creating additional projects is instrumental to further piloting and proving charging concepts that help accelerate EV adoption. FLO looks forward to continuing its work with the Commission developing additional funding programs.

Thank you for your consideration,

[electronically submitted]

Cory Bullis
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FLO