

DOCKETED

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FLO Comments on CEC WIRED Model

Additional submitted attachment is included below.



November 23, 2022

California Energy Commission
Fuels and Transportation Division
1516 Ninth Street
Sacramento, CA 95814
Docket: 19-AB-2127

Re: FLO EV Charging Comments on CEC's WIRED Model AB 2127 Workshop

FLO is a leading North American EV charging network operator and a smart-charging solutions provider. 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 900,000 charging events thanks to over 70,000 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.

To ease rideshare drivers' transition to EVs, we encourage the state to complete more granular analyses of charging infrastructure needs — charging estimates and spatial mapping of charger deployment needs across geographic regions are powerful tools to inform charging companies, utilities, and cities deployment efforts. To that end, we offer the following technical suggestions.

I. Estimate curbside charging potential as part of home charging availability analysis.

In a UC Davis study of 780 TNC drivers in North America, approximately 100 (12 percent) said they were unable to charge at home¹. Further, in this same study, drivers reported spending anywhere from 1.25 to 3.5 hours to charge their EV during a shift, which one quarter of respondents said on average costs them a fare at least once every five times they must charge². As Uber and Lyft increasingly electrify their vehicle supply over the next 8 years in compliance with the Clean Miles Standard, the study's findings raise critical equity concerns:

- How many more drivers will not have access to home charging? A study from the International Council on Clean Transportation indicates that as high as 56 percent of ride-hailing drivers do not have access to home charging³.
- Over 50 percent of respondents in the UC Davis study drove plug-in hybrid EVs. How will they be impacted fiscally when they must transition to a battery EV?
- How might reliance on public fast charging affect their fares, income, and overall cost to charge?

The Clean Miles Standard requires the Public Utilities Commission to minimize the negative impacts of this transition on low-income and moderate-income drivers⁴. If the state is to honor the spirit and intent of this provision, strategically deploying charging infrastructure to support these drivers' transition is

¹ Sanguinetti, A.; Kurani, K. Characteristics and Experiences of Ride-Hailing Drivers with Electric Vehicles. *World Electr. Veh. J.* 2021, 12, 79. <https://doi.org/10.3390/wevj12020079>

² Sanguinetti, A.; Kurani, K. Characteristics and Experiences of Ride-Hailing Drivers with Electric Vehicles. *World Electr. Veh. J.* 2021, 12, 79. <https://doi.org/10.3390/wevj12020079>

³ Nicholas, M., Slowik, P., and Lutsey, N. *Charging Infrastructure to Support Electric Ride-hailing in U.S. Cities*. ICCT. March 2020. Page 6.

⁴ Public Utilities Code Section 5450

critical. Along with other critical charging solutions, curbside charging offers enormous potential to support this transition. Curbside chargers:

- Can be sited strategically adjacent to housing that does not offer on-site home charging.
- Can be Level 2 stations, which serve as a more cost-effective, overnight / longer dwell time charging solution.
- Can relieve congestion on a region's DC fast charging network, potentially avoiding costs to expand some DC fast charger deployment, as evidenced by studies of charging behaviors in Ohio⁵, New York City⁶, and Los Angeles⁷.

And yet curbside charging largely has not been deployed at scale. While there are many factors that affect the feasibility of a curbside deployment, cities are key to making it happen. FLO strongly encourages the Energy Commission (Commission) to include in its next AB 2127 EV infrastructure assessment an estimate of the potential for curbside charging solutions to support Clean Miles Standard implementation and the state's EV adoption goals more broadly. By estimating its potential, the state can increase the salience of this solution to cities by validating the benefits it can offer to EV drivers, helping to motivate cities to take a more proactive role in its deployment.

To truly democratize access to EVs and charging, California needs to take an “all the above” approach to deploy charging solutions; curbside charging is a proven solution that has a proper place in the state's tapestry of charging deployment strategies.

II. Increase granular analysis for cities outside of San Francisco, Los Angeles, and San Diego.

FLO supports the Commission's commitment to providing more granular analysis of charging needs for rideshare drivers beyond San Francisco, Los Angeles, and San Diego. While these cities may be the largest areas for rideshare activity, there are numerous cities across the state where rideshare services are offered (i.e. Sacramento County, the South and East Bay, the greater South Coast Air Basin, and San Diego County). Additional data and analysis can support better planning and coordination between cities, community choice aggregators, utilities, and charging companies to deploy infrastructure in support of these drivers' transition, further fulfilling the goals of the Clean Miles Standard.

Thank you for your consideration,

[electronically submitted]

Cory Bullis
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FLO EV Charging

⁵ Moniot et al. *Feasibility Analysis of Taxi Fleet Electrification Using 4.9 Million Miles of Real-World Driving Data*. National Renewable Energy Laboratory. April 2019. Page 10.

⁶ Moniot et al. *Electrifying New York Ride-Hailing Fleets: an examination of the needs for public fast chargers*. iScience. April 15, 2022. Page 10.

⁷ Schroeder, John et al. *EV Charging for All: How Electrifying Ride-hailing Can Spur Investment in a More Equitable EV Charging Network*. RMI. 2021. Page 8.