



By e-mail

Ms. Elise Keddie
Ms. Stephanie Palmer
Air Resources Board
1001 I Street
Sacramento, CA 95814

June 24, 2019

**Re: EV Charging Station Open Access Act Rulemaking
Additional Comments from FLO**

Dear Ms. Keddie and Ms. Palmer,

We understand that you will receive a submission from a group of charging station manufacturers, providers and operators, which FLO Services USA Inc. ("FLO")¹ has signed. We are providing this letter separately to share the experience of FLO's parent company, AddÉnergie Technologies Inc. ("AddÉnergie"), which was founded in 2009 and is now the largest Canadian EV charging station manufacturer. AddÉnergie is an integrated charging solutions provider, meaning we also manage the stations on our network, called FLO, which is the largest Canadian EV charging network. We have recently launched both our network and our charging solutions in the United States.

As a company, we agree in the strongest terms with the objectives of increasing plug-in electric vehicle (PEV) owners' confidence in electric vehicle supply equipment (EVSE) and improving PEV drivers' ease of charging access to encourage PEV adoption and market development, which we understand to be central objectives of California Senate Bill 454 ("SB 454").² At the same time, we believe that access includes not just convenience, but also consideration of any price impacts on PEV drivers, particularly low income consumers. Our analysis of the proposed rules, particularly as they relate to requirements to include credit card EMV chip readers in public Level 2 EVSE, suggests that this requirement may actually work against broader objectives of increasing access to charging infrastructure, particularly for Californians who are likely to rely on public Level 2 EVSE because they do not have access to home charging.

We have found that Canadian jurisdictions with a focus on urban EV charging are increasingly interested in providing affordable and reliable Level 2 EVSE in public parking areas and on-

¹ In California, FLO does business as FLO Charging Solutions USA Inc.

² California Air Resources Board "Staff Report: Initial State of Reasons" in respect of Public Hearing to Consider Electric Vehicle Supply Equipment (EVSE) Standards released May 7, 2019 ["Staff Report"] at pp. 13 and 30.



streets. On-street charging is often referred to as "curbside" charging, and it can provide an important supplement to public DC fast charging infrastructure. Our company has particular experience working with municipalities, utilities and other stakeholders to deploy curbside EVSE, and we are in the process of launching multiple curbside deployments in the United States, including California.

While curbside charging has not been as widely deployed in California as in some other jurisdictions, we anticipate that it will become increasingly popular because it allows municipalities to provide charging to users who park on the street. This makes it one of the most important tools for dealing with "Garage Orphans," who are not able to charge in dedicated garages or private driveways, an issue that is particularly challenging for residents of multi-unit dwellings ("MUDs"), who may face financial, technical and/or regulatory barriers to charging where they live. This can be a particularly important feature for lower-income PEV users who reside in MUDs, and who may not otherwise be able to dependably access overnight charging options.

While we agree that some private businesses across North America are providing Level 2 EVSE, primarily for customers,³ our experience suggests that this is not sufficient to ensure a comprehensive public charging network for all residents. Curbside charging tends to be attractive to municipalities and utilities particularly because of its relatively low cost, compared to typical DC fast charging. In the City of Montreal, which has one of the most advanced networks of curbside charging in North America, with plans to install 1,000 charging points by 2020,⁴ users are charged \$1 per hour (excluding parking charges).⁵ While this price may not be fully indicative of costs in California, it provides what we consider to be a useful benchmark against which to assess the per-station costs resulting from a requirement to include a chip reader, particularly when keeping in mind the needs of low-income users.

Our technical team has reviewed the costing assumptions provided in the Standardized Regulatory Impact Assessment provided as part of this rulemaking process (the "SRIA")⁶ as well as the station redesign costs we will need to incur to ensure that any readers installed are compliant with PCI-DSS rules, which will likely require a significant re-engineering effort and changes to the telecommunications infrastructure used by our charging stations. We agree with staff's assessment that the price impacts on Level 2 deployments is likely to be larger than for DCFC stations.⁷

³ Staff Report at p. 60.

⁴ City of Montreal "Sustainable Montréal 2016-2020" available at: http://ville.montreal.qc.ca/pls/portal/docs/page/d_durable_en/media/documents/plan_de_dd_en_lr.pdf at p. 20.

⁵ See Electric Circuit "Charging Stations and Prices" available at: <https://lecircuitelectrique.com/charging-stations-and-rates>.

⁶ Staff Report appendix C.

⁷ Staff Report at p. 60.



Our conclusion is that the SRIA's estimate for the cost of a chip reader (\$371/EVSE/year) are likely accurate, but that the costs for annual maintenance, which in our company's case would include additional annual telecommunications fees to support chip readers, likely understates the additional expenses that will be incurred, and which will need to be passed on to site hosts, along with additional design costs, which will be spread over stations sold.

Our preliminary analysis suggests that site hosts deploying standard curbside infrastructure and seeking to recover their investment costs may need to increase the costs ultimately charged to PEV users by 50% to 100%, compared to the costs that they could charge using stations without a mandatory chip reader. These exact price increase required will, of course, vary based on specific site conditions, the period over which a return is expected, utilization and input costs, such as electricity, but we are confident that the cost for charging services will need to be increased by site hosts that need to recover their costs as a result of a requirement to change station design and include an EMV chip reader.

We hope that this analysis and background will be useful to you in considering whether the proposed convenience benefits of an EMV chip reader are worth the financial impacts such a requirement is likely to have on persons who rely on or are likely to rely on the availability of public charging infrastructure as PEV adoption increases in California. We would, of course, be pleased to discuss in more detail, should you have further questions.

Sincerely,

[Provided by e-mail]

Travis J. Allan
VP. Public Affairs, FLO