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Docket No 21-TRAN-03 â€“ Comments of AMPLY Power on the California Energy Commissionâ€™s Zero-Emission Vehicle Infrastructure Plan

Additional submitted attachment is included below.

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February 10, 2022

California Energy Commission
Fuels and Transportation Division
1516 Ninth Street
Sacramento, CA 95814

Re: Docket No. 21-TRAN-03 – Comments of AMPLY Power on the California Energy Commission's Zero-Emission Vehicle Infrastructure Plan

I. Introduction

AMPLY Power, Inc. ("AMPLY") appreciates the opportunity to provide comment on the California Energy Commission's ("CEC") Docket Number 21-TRAN-03, the Zero-Emission Vehicle Infrastructure Plan ("ZIP"). Our hardware- and use case-agnostic approach is intended to be a scalable platform for light-, medium- and heavy-duty fleets to electrify 100 percent on an accelerated basis.

AMPLY is a comprehensive charging and energy management provider for electric vehicle ("EV") fleets focused on reducing costs and environmental impact. We offer a proven, scalable ecosystem of cloud-based software, onsite hardware, and customer-centric service to simplify charging operations for fleets operating trucks, buses, vans, and light-duty vehicles.

OMEGA™ CMS, AMPLY's proprietary charge management system, optimizes charging for lowest cost energy, while offering improved resilience and reliability, all in a user-friendly dashboard. AMPLY actively manages and monitors fleet operators' EVs and chargers, dynamically responding to events in real-time.

Several key features that distinguish OMEGA from other platforms include:

- Guaranteed 99.9 percent vehicle uptime to ensure vehicles are ready to perform their duty cycle at the start of every shift
- Automated Load Management to enable 2x charger capacity without utility service upgrades
- Cost- and battery-optimized fleet charging
- Automated demand response participation and other utility grid services
- Customized compliance and operational reporting
- Integration with bespoke telematics, route, and asset management tools
- Active electric vehicle and EVSE monitoring and alerts
- A single point of contact for monitoring, service level alerts, maintenance, and repairs
- Interoperability with EVs and EVSEs, energy management, and vehicle-to-grid integration

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- Distributed energy resource (DER) management, integration, and interaction, including microgrid solar and storage

AMPLY's Charging-as-a-Service (CaaS) offers EV fleets a comprehensive solution where we assume responsibility for all aspects of charging an EV fleet – from EVSE procurement and installation, to ongoing operations and hassle-free maintenance. With CaaS, we guarantee EV fleet performance in exchange for a price-per-mile-driven fee that bundles CapEx, OpEx, energy, and incentives into a fixed rate, allowing fleet operators to forecast and manage costs long-term.

More and more fleet operators are choosing to go electric as fully functional and reliable electric trucks, buses and off-road equipment become available. Over the last six months, the percentage of fleets planning to deploy EVs within the next year has more than doubled. AMPLY supports this transition with solutions that simplify and de-risk fleet electrification. We have helped diverse fleet operators electrify, including public transit agencies, school bus fleets, delivery services, and ridesharing companies. Through this work, we have seen firsthand the opportunities and benefits of fleet electrification, including lower total cost of ownership for operators, less exposure to local air pollution in frontline communities, and lower greenhouse gas emissions. We have also learned that there are still significant barriers to fleet electrification. Chief among these obstacles are hardware reliability, slow utility interconnection and service upgrade request processes, grant funding restrictions on dedicated charging infrastructure for high-mileage commercial fleets, and insufficient interagency coordination on EV mandates and incentives.

II. AMPLY Supports an Uptime Guarantee to Ensure Hardware Reliability

To maximize overall investment impact, minimize the cost of EV infrastructure deployment to taxpayers and ratepayers, and improve customer experience, the CEC's charging infrastructure goals should not only be volumetric, but also performance-based. To that end, AMPLY supports instituting an uptime reporting requirement in CEC grant programs. Such a requirement would help reduce the deployment of stranded assets and ensure that EV infrastructure is deployed in the most cost-effective and efficient manner. It is imperative to ensure high reliability of EV charging stations to increase consumer and fleet operator confidence in EVs. To extend and meet the expected useful life of EV charging equipment, AMPLY respectfully submits the following recommendations for the CEC's consideration:

1. Monitor if there are disparities in reliability based on demographics, as it could help inform the equitable accessibility of charging stations beyond just their geographic distribution.
2. Institute uptime reporting requirements in CEC grant programs, as well as coordinate with the California Public Utility Commission ("CPUC") to institute this reporting requirement in investor-owned utility ("IOU") programs.

3. Ensure that any CEC guidance considers how operations and maintenance ("O&M"), and licensing fees for services will be accounted for in CEC grant programs, and not just Capital Projects/CapEx.

III. Electric Vehicle Supply Equipment Interconnection and Service Upgrades

Making the process of connecting to the grid simpler and more transparent is essential if we are to meet our state and federal EV deployment goals. Modification to the current utility processes can help to streamline EV charging interconnection and ensure chargers are installed at the rate needed to meet the state's EV adoption and GHG reduction goals. Today, interconnection is a one-off process that can take over a year for a single site. The uncertain timing and complex application process for utility service upgrades delays or discourages EV infrastructure installation, in turn stalling EV adoption by fleets. For example, the CPUC has authorized $718 million for medium- and heavy-duty fleet electrification; only $46 million has been spent to date in part due to interconnection delays. Rigid application requirements are another challenge: fleet operators report that they must have their EV deployment very firm in order to execute a utility contract. This is risky and challenging when the cost and timing of interconnection are unknown. Also, committing to a firm number of vehicles leaves little flexibility or incentive to purchase more EVs as adding more EVs to the fleet requires the fleet owner to repeat the whole process. AMPLY respectfully submits the following recommendations to expedite, streamline and standardize the utility service upgrade request and interconnection processes:

1. *Single Point of Contact Per Customer Portfolio* (not a single point of contact per project): Customers and Developers to interface directly with a single IOU project manager, regardless of project type or region.
2. *Clearly Defined Requirements/Obligations for Customers*: Unforeseen requirements and costs from IOUs can be the cause of service upgrade request delays, including unexpected customer documentation signoffs, which can cause confusion over customer obligations.
3. *Standardized and Committed Turnaround Timelines*: Like Rule 21 and Distributed Energy Resources and Vehicle-to-Grid Integration, IOUs should have an overall goal to shorten implementation to six months through efficiencies gained implementing 1 and 2 above.
4. *Utility Engineering Studies*: Make standards for when IOU engineering review of the distribution system impacts are required. For example, it is not triggered if <500 kW of EVSE is installed.

IV. Be Inclusive and Agnostic to Companies' Business Models

High mileage fleets are playing an increasing role in our transportation system, such as transit fleets, ride-hailing, and delivery services, to name a few. Electrifying high-mileage EV

fleets is a high-impact strategy for reducing emissions -- they drive more than three times the average distance of non-commercial vehicles and have the potential to reduce greenhouse gases per passenger by up to 50 percent per mile. These fleets' diverse use cases and operations ultimately dictate their infrastructure needs. When evaluating its incentive and grant funding programs, we respectfully encourage the CEC to consider the following design principles:

1. Expand funding eligibility and create different incentive levels, as needed, designed specifically for fleets.
2. Be inclusive and agnostic to companies' business models.
3. Be inclusive and agnostic to diverse vehicle and charging use cases (e.g. transit fleets, drayage truck fleets, shared electric autonomous vehicle fleets and transportation network companies).
4. Be inclusive and agnostic to technology – both networked Level 2 and DC fast charging will be critical for fleets.
5. CEC-funded Direct Current Fast Chargers ("DCFCs") should not have to be publicly accessible 24/7 if they serve a public or private fleet. Many downtown cores, where ride-hailing fleets are concentrated, lack locations that are open 24/7, eliminating important opportunities for DCFC deployment, which need to increase drastically in these areas. Public or private fleets may want the option to install DCFCs in their gated depots.
6. Privately-owned DCFCs that serve a public benefit, such as through electrifying ridesharing and delivery fleets, should be eligible for CEC funding. This is a business model that is not currently eligible to receive incentives, and yet it is an important solution that can further states' goals of electrification and fleet deployment. Promoting new innovative business models will help further grow the market and increase private investment in this sector.

According to the CEC's recent Draft AB 2127 EV Charging Assessment, the state needs to deploy more DCFC in places where fleets are concentrated, particularly airports and downtown cores. Electrifying fleets is an equity issue because many lower income communities are unable to afford higher priced EVs. However, the CEC can increase access to EVs in disadvantaged communities by providing incentives for rides in EVs that originate or end in disadvantaged census tracts. Fleet electrification also has the potential to help normalize and socialize EVs in low- or moderate-income areas, which may accelerate EV adoption.

V. Coordination with Advanced Clean Trucks and Advanced Clean Fleets Rules

We also strongly recommend close coordination with the CPUC and CARB on implementation of the Advanced Clean Trucks (ACT) and Advanced Clean Fleets rules. The ACT and ACF will help ensure the prioritization of EV charging infrastructure near frontline and environmentally disadvantaged communities. We respectfully encourage the CEC to coordinate closely with CARB to identify vehicle deployment trends to support strategic EVSE planning and avoid stranded assets. This interagency coordination will help ensure that charging infrastructure can meet fleets' wide range of duty cycles.

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Sincerely,

/s/Heidi Sickler

Heidi Sickler
Director of Policy
AMPLY Power