DOCKETED	
Docket Number:	24-EVI-01
Project Title:	U.S. Department of Transportation’s Charging and Fueling Infrastructure Grant Program
TN #:	256781
Document Title:	Powering America's Commercial Transportation Comments - PACT Comments on CEC RFI
Description:	N/A
Filer:	System
Organization:	Powering America's Commercial Transportation
Submitter Role:	Public
Submission Date:	6/10/2024 3:34:53 PM
Docketed Date:	6/10/2024

Comment Received From: Powering America's Commercial Transportation
Submitted On: 6/10/2024
Docket Number: 24-EVI-01

PACT Comments on CEC RFI

Please find attached the comments of Powering America's Commercial Transportation ("PACT").

Additional submitted attachment is included below.

June 10, 2024

California Energy Commission
715 P Street
Sacramento, CA 95814

PACT Comments in Response to the California Energy Commission's Request For Information Docket No. 24-EVI-01

I. Introduction

Powering America's Commercial Transportation ("PACT") appreciates the opportunity to submit comments to the "*Project Proposal Ideas and Considerations for California, Oregon, and Washington's Medium- and Heavy-Duty Joint Application for the U.S. Department of Transportation's Charging and Fueling Infrastructure ("CFI") Discretionary Grant Program."* PACT applauds the tri-state partnership's intent to reflect stakeholder needs and priorities in the formation of project ideas and considerations for the Corridor Program application. PACT hopes that the answers provided will serve to strengthen the tri-state's CFI program bid.

II. About PACT

Powering America's Commercial Transportation ("PACT") is a coalition dedicated to accelerating the development and deployment of reliable nationwide charging infrastructure for medium- and heavy-duty ("M/HD") zero-emission vehicles ("ZEVs").[1]

Our membership comprises stakeholders across the transportation electrification ecosystem, including leading truck manufacturers, charging infrastructure technology providers and developers, commercial fleets, fleet management companies, and utilities.[2] PACT is committed to promoting productive, cross-sector collaboration to advance policies and regulations that improve access to and reduce barriers for M/HD charging infrastructure. PACT engages nationally on matters related to transportation electrification ("TE"), including but not limited to

[1] M/HD refers to Class 6 - 8 vehicles, according to the Federal Highway Administration https://afdc.energy.gov/data/10381

[2] PACT membership comprises ABB E-mobility, Amazon, Alpitronic, BC Hydro, Burns & McDonnell, Chateau Energy Solutions, Cummins, Daimler Truck North America, EV Realty, Geotab, Greenlane, InCharge, InductEV, J.B. Hunt Transport, Inc., Mortensen, Navistar Inc., Penske, Pilot Flying J, Pioneer eMobility, PittOhio, Prologis, Voltera, WattEV, Volvo Group North America, and Zeem Solutions.

project energization timelines, infrastructure funding strategies, and make-ready programs to accelerate the deployment of M/HD ZEVs and its attendant infrastructure.

III. Interest in This Matter

Industry faces regulatory requirements at both the state and federal level, including Advanced Clean Trucks ("ACT") and the U.S. Environmental Protection Agency's Greenhouse Gas Phase 3 rule. States have also recognized the important role that transitioning M/HD vehicles to ZEVs plays in reaching decarbonization and clean air goals and, as such, have developed or in the process of designing programs that are intended to incentivize the purchase of M/HD ZEVs. Industry is committed to meeting these requirements: M/HD ZEVs are available now, fleets are willing to purchase them, and electric vehicle supply equipment ("EVSE") companies are ready to provide the necessary infrastructure. However, in order to meet these requirements, M/HD vehicles require affordable charging infrastructure and an electric grid ready to support that infrastructure at scale.

There are distinct and significant considerations for electrifying the M/HD sector. M/HD charging sites are major construction projects and have physical requirements which differ from those for light-duty vehicles. Site configuration for M/HD vehicles requires distinct considerations for ingress and egress, turning radii, longer charging cable lengths, pull-through lanes, and often higher charging speeds to support larger batteries in commercial vehicles. Moreover, light-duty charging infrastructure cannot necessarily be "upgraded" to support M/HD vehicles. There is also a considerable misalignment in timelines between when an OEM is able to manufacture and deliver vehicles and when a utility can electrify a site that often requires long-lead upgrades. Such misalignment in timelines often leads to OEMs delivering trucks to fleets only to have those trucks sit on the lot, or fleets canceling ZEV truck orders. In addition to reducing up-front costs for such projects, developing clear and reliable project timelines, and proactively beginning long-lead distribution upgrades, is essential to create a sense of certainty for industry, and certainty is essential for the successful transition to M/HD electrification.

Despite the challenges to M/HD electrification, stakeholders across the ecosystem are taking the steps needed to make the transition now. To support the industry, it is critical that sites are designed with the greatest degree of flexibility possible to accommodate a variety of vehicle use cases, business needs, and charging models. The M/HD sector is growing, but nascent, and flexibility will reap the most significant benefits. Site selection should also accommodate likely "first movers," consider truck traffic and density, and not artificially constrain developers in a manner that triggers unintended consequences (i.e., grid upgrades). Moreover, to support M/HD infrastructure, in addition to reducing up-front costs for infrastructure projects PACT encourages

states to (1) expedite energization timelines; (2) streamline and expedite permitting and zoning amendments as needed to allow for construction and operation of M/HD ZEV infrastructure; (3) encourage utility incentives like "make-ready" programs, line extensions policies, etc. that will help defray grid upgrade costs to the customer; and (4) allow for flexibility in programs for public vs. private ZEV infrastructure and treat these programs equally in regards to funding.

PACT members have a vested interest in ensuring that the programs and policies designed to support this transition are effective and represent the needs of the M/HD ZEV ecosystem. Swift deployment of M/HD ZEV infrastructure will support efforts to meet state regulatory, decarbonization, and climate goals, and send clear signals to industry that the requisite support is behind this transition.

IV. Response to RFI

PACT is pleased to offer the following responses to selected questions posed in the tri-state RFI:

1. *Please disclose your business type and vehicle class, if applicable. Are you a driver, fleet operator, truck stop operator, installer, manufacturer, utility, public agency, or other? Are you part of a small, veteran-owned, woman-owned, or minority-owned business?*

PACT represents stakeholders across the transportation electrification ecosystem. Our membership comprises leading truck manufacturers, charging infrastructure technology providers and developers, commercial fleets, fleet management companies, and utilities. PACT's scope is focused on electrifying Class 6 - 8 trucks but is supportive of accelerating infrastructure that can support M/HD vehicles across class sizes.

2. *Would you consider applying for CFI grant funding for site development if the tri-state agencies are awarded funding?*

While PACT as an organization would not apply for grant funding, individual members would be highly motivated to apply for funding for site development.

3. *Do you already operate or are you planning to use zero-emission battery electric MDHD vehicles in the next five years? Please use a 1-5 rating scale where 1= least likely and 5= most likely. Please add additional information regarding your (planned) use of zero-emission battery electric MDHD vehicles as desired.*

PACT's members are manufacturing, operating, and fueling M/HD ZEVs today.

OEMs are ready to deliver Class 6 - 8 zero-emission vehicles today for a variety of use cases. For example, Daimler Truck North America is investing significantly in the development of electric vehicles, currently offering battery electric school buses, walk-in van chassis (Class 5/6), as well as medium-duty (Class 6/7) and heavy-duty (Class 8) tractors for sale, suitable for local pickup and delivery. Volvo Group North America currently sells five configurations of the Volvo VNR Class 8 Electric truck, the Mack LR Electric waste hauler, and the Mack MD Electric work truck.

PACT members are also deploying charging infrastructure across Washington, California, and Oregon. For example, Volterra recently opened its first Class 8 drayage charging depot in the Los Angeles region with 65 installed high-powered DC fast chargers ("DCFC"). Prologis, a global leader in logistics real estate and Performance Team – A Maersk Company, recently built a 9 MW Denker heavy-duty electric vehicle charging depot in Southern California in just five months. WattEV has built large-scale solar-powered charging depots on I-5 from San Diego to Seattle-Tacoma. Daimler Truck has been operating a commercial EV charging site in Portland since Spring 2021.

4. *What type of MDHD ZEV public charging do you anticipate being most important in the next three years (2024-2027) – en route or overnight charging? For what purposes do you anticipate needing public charging infrastructure – drayage, last-mile, delivery, long-haul freight, other?*

PACT anticipates that both en route and overnight charging will be critical to support M/HD ZEVs in the near future, and a variety of both public and private charging models will be critical to accommodating transportation electrification. The M/HD ZEV market is growing, but still nascent and as such needs an adaptable approach. Charging developers should be provided with the flexibility to plan for power levels that accelerate the deployment of M/HD ZEVs at scale and can accommodate a variety of business needs and use cases. This includes utilizing a mix of charging speeds at sites to provide customers with the option for overnight or long dwell charging–which also offers a potentially more cost-effective solution for fleets who can utilize this charging model–as well as higher capacity chargers for faster, en route charging.

PACT does not foresee traditional long-haul trucking as the first segment to be broadly electrified. While long-term planning for future electrification needs should be happening now, PACT believes there are opportunities for broader electrification in the near-term, including regional and local haul routes like drayage, last mile, and medium haul routes around 150 miles. PACT anticipates that public charging will be needed to accommodate M/HD vehicles that

commonly operate near ports, industrial areas and private depots, highway adjacent warehouses, and similar locations.

Proximity to freight corridors, major distribution hubs, and sites serving areas with high freight traffic volumes are strong candidates for public charging hubs in the next three years.

5. *From 2024-2027, what is your first priority for power level and number of charging ports for public en route charging at a station? For public overnight charging? Do you have a second or third configuration preference?*

A steep rate of growth for reliable and affordable M/HD charging infrastructure is critical to meeting federal and state regulatory requirements. For that reason, PACT does not envision it being necessary to establish a minimum number of charging ports at public charging sites. Developers are planning and building sites of all sizes. Moreover, public charging necessitates a variety of site designs to ensure market flexibility and that commercial fleets have options to pick the charging model that works best for their business operations.

PACT's priority is that charging sites are not required to adhere to a minimum nameplate capacity. Charging infrastructure providers and fleets should have flexibility to plan for power levels that accelerate the deployment of M/HD ZEVs at scale and across diverse market segments. Developers are utilizing a mix of charging speeds at depots to provide customers with the charging option that best fits their needs, potentially including lower power solutions for overnight or long-dwell charging.

PACT also supports future-proofing sites to accommodate future charging rates, including for speeds up to 1.5 MW. Future proofing sites will ensure that customers or developers need only "build once." Preparing sites now for anticipated future demand will ensure that necessary upgrades down the line are less costly. Future proofing is done on a site-wide basis, meaning total site power demand and not just power per port.

6. *Please identify the percentage of pull-in or pull through parking preferred and other desired station configurations at a given site. Describe the vehicle class and vocation considered when making this recommendation if it differs from the information provided in question 1.*

Site configuration for M/HD vehicles requires distinct considerations for ingress and egress, turning radii, longer charging cable lengths, pull-through lanes, and often higher charging speeds to support larger batteries in commercial vehicles. As a general best practice, pull-through

charging is the preferred configuration for public charging sites to accommodate the most vehicle types.

Specific considerations for station configuration should include:

- Wide ingress and egress to accommodate maneuverability of Class 6 - 8 vehicles.
- Longer cable lengths and flexible charger locations to serve the commercial fleet and reach charging ports on a wide variety of chassis configurations.
- Flexible connector and charger sizes to accommodate a range of commercial M/HD ZEV applications.

7. *What distance should separate charging stations to support zero-emission trucks along the I-5 corridor? Provide description of typical route or use-case considered when making this recommendation. Describe the vehicle class and vocation if it differs from the information provided in question 1.*

PACT appreciates that the intent of the consortium is to align their CFI grant application with the goals of the National Zero-Emission Freight Corridor Strategy. However, the programs diverge on a critical point. The CFI Program is intended to build on the FHWA Alternative Fuel Corridor ("AFC") program and complement the National Electric Vehicle Infrastructure ("NEVI") Formula program, which is initially focused on enabling long distance trips along the National Highway System. Phase 1 of the Corridor Strategy, however, is primarily focused on local and regional return-to-base operations, first-/last-mile delivery, and drayage.

In order to ensure that the tri-state application maximizes the potential benefits of a grant award and compliments the intent of both the CFI Program and the Corridor Strategy, PACT would encourage the consortium to avoid establishing a minimum distance requirement between sites.

Ideally, site selection would be supported by flexibility that allows for charging infrastructure to be located in those places with the highest levels of truck traffic and in a manner that facilitates faster, lower-cost infrastructure deployment. Specific geographic or locational requirements could create unintended consequences, such as unintentionally triggering additional utility upgrades by artificially constraining developers to prioritize location over grid capacity.

Site selection along the I-5 corridor should not be dependent on distance between sites and rather focused on accommodating business cases most likely to utilize those sites. PACT would instead encourage the consortium to prioritize sites along I-5 that are able to accommodate the charging needs of likely "first movers," as noted in response to question 4, including use cases such as short-haul, hub-and-spoke operations, drayage, middle mile, and last mile deliveries.

8. *If possible, provide any general cost estimates for MDHD charging stations you have designed, built, or have experience with, including charger power levels and number of chargers installed. Please provide a range of public cost share as a percentage of total project cost that would be necessary to support more public charging stations to serve zero-emission trucks along freight corridors.*

Project costs vary depending on numerous factors, including but not limited to the size of the site, the number of vehicles to be powered, the power levels of the charger on site, grid infrastructure requirements, labor and material costs, and whether the developer owns the land. Exact project costs are especially difficult to define in this context given the number of variables across the three states. For example, under the first round of CFI awards, projects to accommodate M/HD charging received grants ranging from $12 to upwards of $60 million.

In regard to cost sharing, PACT would encourage the tri-state application to consider the agreement parameters defined in the Federal Highway Administration Notice of Funding Opportunity for the CFI grant program.[3]

V. Conclusion

PACT appreciates the opportunity to respond to this RFI to inform the development of the tri-state application for a CFI grant. PACT hopes that the information provided will serve to strengthen the tri-state proposal and, in turn, support the swift deployment of M/HD charging infrastructure. PACT is available to answer any questions that the California Energy Commission may have regarding the answers provided to this RFI, and stands ready to be a resource to the consortium in the ongoing development of this CFI application.

Sincerely,
PACT

David Bonelli
Partner, Venable LLP
DMBonelli@Venable.com
On behalf of PACT

[3] The Notice of Funding Opportunity states that "the Federal share of the cost of a project carried out with CFI Program funds under both programs shall not exceed 80 percent of the total project cost (23 U.S.C. § 151(f)(10)). Cost sharing or matching is required, with the maximum Federal share being 80 percent of the total cost of the project. Awardees must provide at least 20 percent of the total project cost (not 20 percent of the Federal share) as a matching share." (pg. 22)