

DOCKETED

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**Electrify America Comments - Medium- and Heavy- Duty (MDHD)
ZEV Infrastructure Funding Allocation Workshop**

Additional submitted attachment is included below.



March 18, 2022

Hannon Rasool
California Energy Commission
715 P Street
Sacramento, California 95814

RE: 19-TRAN-02 MD/HD Allocation

Dear Mr. Rasool:

Electrify America appreciates the opportunity to comment on the February 28 Medium- and Heavy-Duty (MD/HD) ZEV Infrastructure Funding Allocation Workshop. With the market for MD/HD ZEVs ready to quickly scale, we appreciate the California Energy Commission (CEC) carefully considering how it leverages its resources to quickly and effectively scale the market.

Electrify America operates the largest open network of DC fast chargers (DCFC) in the nation, and recently reached a milestone of 200 public ultra-fast electric vehicle (EV) charging stations and over 830 individual chargers in California. Electrify America is also leading the charge to support the deployment of MD/HD ZEVs in California. For example, Electrify America and NFI Industries have announced plans for the nation's single largest charging infrastructure project to support heavy-duty electric trucks, with 34 ultra-fast DC chargers expected to be operational in 2023. As another example, Electrify America recently announced a Green City initiative, which will invest \$25 million in or serving Long Beach and the Wilmington neighborhood of Los Angeles to install ultra-fast EV charging infrastructure to support the electrification of public transit and freight trucks serving the community. We are also investing another \$10 million in California, specifically for medium- and heavy-duty use cases, as a part of our Cycle 3 ZEV investment plan.

As the CEC considers future funding allocations to support MD/HD ZEV infrastructure, we urge you to adhere to three main principles support the State's transportation electrification goals:

1. Prioritize ultra-fast charging as the most optimal solution for MD/HD charging, while laying the groundwork for investment in Megawatt Charging Standard (MCS) technology in the future
2. Require investment capabilities that enhance charger reliability
3. Require the use of non-proprietary technology so that any electric vehicle can charge at any station, consistent with the CCS Standard or the emerging MCS Standard, and compliant with ISO 15118.



We have elaborated on these items in previous comment letters, including our comments submitted as part of the Zero Emission Infrastructure Plan (ZIP).¹

Regarding the specific items presented the February 28 workshop, we urge the CEC to prioritize large-scale, ultra-fast charging stations in future funding programs. This strategy offers a cost-effective infrastructure solution to reach MD/HD EVs at scale. We appreciate that staff recognized as much in the workshop, and agree with their specific points raised in the slides, including that (slide 46):

- Allows for economies of scale for charging infrastructure projects
- More cost-effective overall financing of charging infrastructure
- Higher kW/\$ and chargers/\$ value for use of public funding

We support the solicitation concept to fund large-scale, ultra-fast charging stations in a manner that provides replicable models for public access ultra-fast charging and increases private sector financing of these stations. Regarding the specific questions posed, we offer the following responses:

- What defines a site as large scale? How many chargers/outlets would be the minimum?

In our California Medium- and Heavy-Duty investments for the Cycle 3 initiative, we are seeing many of the projects be ten dispensers at the minimum.

- What is the industry accepted minimum for ultra-fast charging?

Electrify America is proud to be a leader in deploying ultra-fast charging, and has essentially established the standard for this technology category. We define ultra-fast charging as 150 kW of dedicated power per charger, or higher, delivered via a non-proprietary CCS connector, at a minimum of 350 amps. We believe that all future stations should also have 350 kW capability on some or all chargers at each station site. We note that this is an extremely similar definition to minimum standards for charging stations to receive Federal funding under the \$5 billion NEVI Formula Program.²

Ultra-fast charging using the CCS standard is distinct from the emerging Megawatt Charging Standard (MCS). The industry is working on a global basis to finalize the MCS standard on an expedited timeline, and in a non-proprietary manner.

Electrify America encourages the California Energy Commission to explicitly direct its MD/HD charging investment towards charging stations deploying (1) non-proprietary CCS ultra-fast chargers (150+kW), with a clear advantage for 350+kW charger technology and (2) MCS capable chargers.

¹ <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241432&DocumentContentId=75384>

² The National Electric Vehicle Infrastructure (NEVI) Formula Program Guidance, February 10, 2022.

https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf



- How many entities would be able to apply to this sort of solicitation, due to the large scale?

Electrify America discourages the California Energy Commission from limiting the number of entities that would be able to apply for its competitive solicitations. Encouraging applicants represents a sound strategy for creating a robust competition among proposals.

Electrify America would reiterate its past suggestion that funds be committed to charging infrastructure programs post construction, utilizing a rebate structure. This approach avoids the commitment of funds to projects that are unlikely to be built, and provides stakeholders with the incentive to expedite investment. Electrify America strongly discourages the Commission from committing funds to MD/HD charging infrastructure projects before (1) access to the station site is established via contract or deed, (2) permits have been received, (3) utility new service design has been finalized, and (4) fleet customer binding commitments have been secured.

Thank you for the opportunity to comment on this workshop and CEC's consideration of future programs to support the deployment of MD/HD ZEVs. If you have any questions, please do not hesitate to reach out to me or Ryan McCarthy with the Weideman Group (ryan@weidemangroup.com).

Sincerely,

Matthew Nelson
Director of Government Affairs
Electrify America