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Dr. Cheryl Laskowski
Chief, Transportation Fuels Branch

California Air Resources Board
Low Carbon Fuel Standard Program
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TeraWatt Infrastructure Comments on the November 9, 2022, LCFS Workshop – Potential Future Changes to the LCFS Program

Dear Dr. Laskowski,

TeraWatt Infrastructure, Inc. (TeraWatt) appreciates the opportunity to submit comments on the potential future changes to the Low Carbon Fuel Standard (LCFS) program. TeraWatt is a project developer and long-term owner of high-powered EV charging infrastructure for light, medium- and heavy-duty commercial fleets.

Introduction

The following are a summary of TeraWatt's feedback to CARB after the November 9, 2022 workshop:

- **Fast Charging Infrastructure (FCI) Credits for Medium- and Heavy-Duty Vehicles (MDHV) should be created** to support any of the CI reduction target scenarios that may be adopted.
- **Definition of "Publicly Accessible" should be amended** to align with federal definitions and support independently operated fleet charging infrastructure.
- **CARB should develop a stakeholder process** to define details within the current FCI regulation that will need to be adapted for MDHV.

Specific Feedback on CARB Staff Questions and Proposals

Fast Charging Infrastructure (FCI) Credits for Medium- and Heavy-Duty Vehicles

In the Staff proposal for various scenarios for increasing the stringency of CI targets for 2030, each scenario within the CATS model included an active implementation of an FCI for medium- and heavy-duty vehicles. As stated in previous comments on the July 2022 LCFS workshop, TeraWatt commends Staff's proposal to extend the Fast Charging Infrastructure

(FCI) pathway to specifically support public, medium- and heavy-duty (MHDV) refueling applications.

The extension of the FCI pathway to support the build out of MDHV charging infrastructure is urgently needed to support the deployment of medium- and heavy-duty vehicles, ahead of the time when this infrastructure is realistically able to be fully utilized. The economic concepts behind FCI, which has been utilized almost exclusively for light duty vehicle applications, are evident, especially in the heavy-duty vehicle market, albeit with the industry factors and challenges being more extreme. An FCI for MDHV will attract private sector investment in California that can leverage the mechanism to mitigate upfront risks of building out infrastructure before the vehicles are fully deployed. This is critical because many fleet operators are and will continue to be hesitant to accelerate their fleet conversion to electric absent of the necessary charging infrastructure already being available at time of vehicle delivery. The enhancement of FCI to support MDHV refueling is necessary to proactively deploy the charging infrastructure needed for these fleet operators to meet California's zero emission transportation mandates, such as the Advanced Clean Fleet regulation currently under consideration by CARB.

Definition of "Publicly Accessible" Refueling Infrastructure

TeraWatt continues to support the FCI as a mechanism for public infrastructure; however, CARB should amend the definition of "publicly accessible" to take into consideration the specific conditions of MDHV charging. Specifically, CARB should adopt a definition that maintains the "public" nature of the FCI, but align the definition with other federal programs, such as the definition within the National Electric Vehicle Infrastructure (NEVI) formula program. The statutory definition of that program specifically states that:

*"State may use funds provided under the NEVI Formula Program for EV charging infrastructure on any public road or in other **publicly accessible locations that are open to the general public or to authorized commercial motor vehicle operators from more than one company.**"¹*

TeraWatt would support a similar definition adopted for a MDHV FCI pathway, that allowed for independently operated EV charging infrastructure locations that serve two or more commercial fleet customers be considered "publicly accessible" for the purposes of the FCI pathway. We would encourage CARB to consider not only extending this definition for MDHV refueling locations, but also amend the overall definition as these and other fleet refueling locations that may be serving LDV fleet vehicles should still qualify for the FCI under this revised definition.

¹ "DOT Funding and Financing Programs with EV Eligibilities", NEVI Formula Program Guidance, Pg. 11, https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf

Stakeholder Process Needed to Further Define Modifications for a MDHV FCI Pathway

An FCI pathway for MDHV will necessitate the consideration of several modifications to the FCI pathway for LDV due to the differences between charging applications for MDHV than those of LDV. TeraWatt recommends that CARB initiate a stakeholder process to allow for industry participants, technical experts, environmental organizations, local governments, etc. to provide feedback on the different considerations that are unique to the MDHV sector. This should include considerations for:

- Max station capacity (i.e. MegaWatt Charging Standard)
- Location recommendations and network requirements
- Considerations for sites that serve both MDHV and LDV
- FCI crediting formula for MDHV sites
- Revised crediting periods and operations deadlines

TeraWatt would encourage Staff to begin this stakeholder process as soon as possible in order to incorporate the necessary stakeholder input into final regulations for an updated FCI mechanism.

Conclusion

TeraWatt applauds Staff and the Board for the innovation and progress of California Low Carbon Fuel Standard program to date and looks forward to the amendment process to enhance the Regulation to deliver material carbon reductions directly in California and as a model regulation for other jurisdictions.

Sincerely,



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