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on CEC RFI Potential Solicitation for MDHD Charging and Refueling Infrastructure on Corridors

Additional submitted attachment is included below.

Truck.Net LLC

April 13, 2023

California Energy Commission
Docket Unit, MS-4
Docket No. 19-TRAN-02
715 P Street
Sacramento, CA 95814-5513

Submitted via electronic mail to docket@energy.ca.gov

RE: 19-TRAN-02 Staff Workshop on Potential Solicitation for MD/HD Charging and Refueling Infrastructure on Corridors

Truck.Net LLC ("Truck.Net") appreciates the opportunity to respond to the Request for Comments from the California Energy Commission (CEC) March 28, 2023, Staff Workshop on Potential Solicitation for MD/HD Charging and Refueling Infrastructure on Corridors. In this submission, Truck.Net provides feedback on the program scope and requirements specific to development of MD/HD hydrogen refueling infrastructure.

Project Summary

Executive Order N-79-20 signed by Governor Newsom on September 23, 2020, establishes, among other actions to address the climate crisis, that 100 percent of MD/HD vehicles in the state be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks. Further, the California Air Resources Board's (CARB) Advanced Clean Fleets regulation, which is anticipated to be passed in 2023, will require MD/HD infrastructure to support a strong regulation and transition away from fossil fuels.

Truck.Net is committed to supporting the clean energy transition of the MD/HD transportation sector. In collaboration with California Energy Commission and San Diego Gas & Electric, Truck.Net recently opened four first-of-their-kind public direct current (DC) fast chargers at its facility adjacent to the Otay Mesa Land Port of Entry, the busiest commercial border crossing in California which processes nearly one million commercial trucks and five million privately owned vehicles each year. Expanding upon this success, Truck.Net is well-positioned to enable

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further fleet emissions reductions enable further fleet decarbonization with hydrogen-based MD/HD vehicle fueling.

Truck.Net proposes to develop and implement a hydrogen system that will directly serve heavy, medium, and light-duty transportation and to promote and accelerate the local hydrogen economy. To further these efforts, Truck.Net has partnered with San Diego Gas & Electric ("SDG&E") through the San Diego Grid-connected Electrolysis Network (SDH_2NET) consortium to prepare a site-specific techno-economic analysis which assesses current and future hydrogen demand and creates a detailed engagement plan to educate and support Truck.Net's large fueling customer base through the transition to clean hydrogen.

Truck.Net's Strategic Importance to the International Commercial Port of Entry and Freight Corridor

California Energy Commission's ("CEC") Potential Solicitation for MD/HD Charging and Refueling Infrastructure on Corridors includes I-5 from the south border to norther border in the "Proposed Top Six Freight Corridors". Truck.Net proposes that this corridor be expanded to include State Route 905 which serves as an important nexus to the I-5 and I-805 corridors, the Port of San Diego and the Port of Long Beach.

The Otay Mesa Land Port of Entry ("OMPOE"), located in San Diego County, is the busiest commercial port in California. Between 4,500 and 5,000 medium and heavy-duty vehicles transit the OMPOE daily as they transport goods between the maquiladoras located in Mexico and the United States. Once in the United States, these medium and heavy-duty vehicles travel via State Route 905 to various destinations throughout the State and country. Presently, there are no in-region hydrogen fueling stations to support a broad adoption of medium and heavy-duty hydrogen-fueled trucks which transit the border region between the U.S. and Mexico.

Truck.Net is the largest truck stop and fuel station in San Diego, strategically located alongside the commercial truck route to Mexico and the OMPOE, which offers public fueling services to these vehicles. For reference, Truck.Net currently dispenses ~1.5M gallons of fuel per month which translates to 10,000 monthly fuel transactions. Deployment of a hydrogen fueling station at Truck.Net would be ideally positioned to support medium and heavy-duty fleet operators as they transitioned from diesel to hydrogen fuel and raise international awareness of hydrogen implementation.

Truck.Net's Commitment to Supporting the Adoption of Alternative Fuels Within the Border Community

Hydrogen and fuel cells can reduce emissions in heavy-duty vehicles, which make up 5% of vehicles on U.S. roads, are responsible for more than 20% of transportation emissions, and are

the largest contributor to mobile nitrogen-oxide emissions in the United States. The CEC's Potential Solicitation for MD/HD Charging and Refueling Infrastructure on Corridors should prioritize transportation applications and locations along busy freight corridors where hydrogen fueling stations would be strategically located to support the movement of goods via hydrogen fueled trucks.

Truck.Net is an experienced regional stakeholder with a track record of serving the fueling needs of a large and diverse customer base, including commercial trucks, buses, and cars and is committed to supporting the clean energy transition of the transportation sector. In collaboration with California Energy Commission, Truck.Net recently opened four first of its kind publicly available direct current (DC) fast chargers for medium and heavy-duty vehicles in California through participation in SDG&E's Fleet Program. Truck.Net is additionally constructing a CNG/RNG fueling station for long-haul fleet operators that are unable to use electric technology at this point. Installation of a hydrogen fueling station at Truck.Net would further promote alternative fuel vehicle adoption to Truck.Net's significant customer base of fleet owners and operators.

Truck.Net's Community Impact

The Transportation sector is responsible for significant greenhouse gas emissions and public health impacts. These emissions are further compounded in the Border region where medium and heavy-duty trucks can idle for hours which waiting to cross to the U.S. from Mexico. In contrast, zero-emissions vehicles, like hydrogen fuel cell–powered public buses and drayage trucks, can idle without contributing to air pollution. Drivers can keep their vehicles on while stopped to provide cooling or heating for comfort. However, widespread adoption of hydrogen medium and heavy-duty vehicles cannot be accomplished without ensuring that a hydrogen fueling station is located nearby the commercial border crossing.

Per CalEnviroScreen 4.0 indicators, Truck.Net's location ranks in the >90-100th percentile for PM2.5 pollution as well as Traffic Impacts. Deployment of a hydrogen fueling station at Truck.Net will reduce both air pollution emissions and pollutant exposures which disproportionately impact low-income and disadvantaged communities, such as those located on both sides of the International border. Truck.Net's hydrogen system as currently proposed would lead to an estimated 6.1M kg/yr CO_2 and 360 kg NO_x/yr emissions avoidance. The hydrogen station would also contribute to an estimated 600,000 gallon per year reduction in fossil fuel consumption.

Of additional importance, clean energy projects have the potential to bring well-paid, skilled jobs to the Border region and surrounding urban communities, extending the benefits of these opportunities beyond the projects themselves.

Given uncertainty in customer/fleet deployment of hydrogen, solicitation should require single dispenser but demonstrate capability to scale. Extra points to mixed use stations, and stations that can self-generate hydrogen to reduce transport emissions of hydrogen.

Truck.Net is located on 8.5 acres providing sufficient acreage, not only to construct the single hydrogen system and dispenser contemplated under this CEC solicitation, but to expand the facility in future to meet growing demands for hydrogen fuel facilities. Including a grid-connected electrolyzer with the project design, provides direct, measurable and impactful decarbonization results in transportation and additionally serves as a source of critical backup power.

Project Concept Description

Truck.Net is currently preparing a preliminary plan set that would locate a public hydrogen fuel dispenser and fueling infrastructure on a one-acre site within Truck.Net's larger truck stop fueling facilities. These plans additionally include details to incorporate an on-site grid-connected electrolyzer for clean hydrogen production. Utilizing renewable energy sources when available, this component will minimize the environmental impact of hydrogen generation and ensure a more sustainable and secure fuel source. The hydrogen fueling station would be constructed such that it could be scaled up to meet increased future demands. The dispensing infrastructure will be accessible to various vehicle types, including commercial trucks, buses, and passenger cars.

Truck.Net's existing DC fast charging infrastructure has been similarly designed to allow additional charging stations to be deployed as more fleet operators transition to medium and heavy-duty electric trucks.

Funding

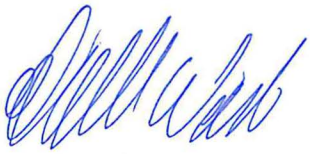
Collaboration with California Energy Commission's (CEC) on the proposed project would yield critical data regarding actualized CO2 emissions avoided with clean hydrogen, fleet hydrogen adoption rates and customer considerations, and hydrogen fueling station operations and maintenance. Further, this project could be aligned with Department of Transportation's NEVI funding and generally recommend that projects under this potential solicitation that also meet NEVI applicant criteria be prioritized.

The Potential Solicitation for MD/HD Charging and Refueling Infrastructure on Corridors contemplates limiting the maximum funding grant to fifty percent (50%) of the total project match. However, design and construction of a hydrogen fueling station, with its associated infrastructure and technology, cost tens of millions of dollars. Commercial fleet owners and fueling station site owners would face significant financial hurdles in bearing these remaining

costs. This financial burden would only be compounded by the expenses already incurred by fleet owners in replacing diesel-fueled medium and heavy-duty vehicles with hydrogen-fueled trucks. Instead, Truck.Net would encourage the CEC to review each proposal for funding grants on its merits and potential for promoting widespread adoption of hydrogen vehicles before setting a limit on the grant funds provided.

Thank you for your consideration of Truck.Net's comments. We welcome further discussion of our comments and anticipate that a proposed hydrogen fueling station at our location will deliver high value to the MD/HD Zero Emission Vehicle and Infrastructure Program.

Sincerely,



David Wick
President of Member
Truck.Net LLC