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*Comment Received From: California Hydrogen Car Owners Assn
Submitted On: 1/22/2025
Docket Number: 19-TRAN-02*

Response to Request for Information

Please see attached memorandum.

Additional submitted attachment is included below.



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Memorandum

To: California Energy Commission

From: Gregory Cane, President (greg@h2tonps.org) *Gregory R. Cane*
California Hydrogen Car Owners Association (CHCOA)

Date: January 22, 2025

Subject: Response to Request for Information
Docket: 19-TRAN-02; Dated January 15, 2025

Thank you for the opportunity to respond to this Request for Information ([Docket 19-TRAN-02; Dated January 15, 2025](#)). As reflected in the request, “*The California Energy Commission (CEC) is seeking information from medium- and heavy-duty (MDHD) industry stakeholders to better define “public” charging and **refueling** infrastructure for CEC funding opportunities.*” (emphasis added)

As an independent nonprofit organization representing California hydrogen car owners, our input will narrowly focus on those questions of publicly-available hydrogen refueling dispensers for light-duty/medium-duty vehicles (Questions 1 and 2).

1) It is widely recognized that hydrogen fuel cell trucks will play a prominent role in the greening of the transportation industry in California. The ability of these trucks to carry heavier payloads makes it likely that they will haul the bulk of future over-the-road freight tonnage:

- Dale Lemmons, Immediate Past Chairman, WA Trucking Assn, [Article in The Chronicle](#), Posted March 1, 2024
 - “The benefits of using hydrogen fuel cells for heavy-duty and long-haul commercial trucking are clear. One of the most significant benefits of hydrogen fuel cells is their extended range. Hydrogen-powered trucks can cover longer distances on a single refueling compared to battery-electric trucks. This makes them well-suited for long-haul transportation, where range is a critical factor. Hydrogen fuel cell trucks also offer rapid refueling times, taking approximately 30 minutes per refuel. This quick turnaround time is particularly advantageous for companies that require rapid and continuous operations. Hydrogen fuel cells are also generally lighter than the large batteries needed for heavy-duty electric trucks, allowing hydrogen-powered trucks to carry heavier payloads, making them more suitable for applications where maximizing cargo capacity is essential.”

- [The Role of Clean Fuel Systems in a California Hydrogen Transition: A Comparison of Hydrogen, Synthetic Natural Gas, and Related Fuels; Burke & Fulton; UC Davis; November 1, 2023](#)

- *“Given the need for long distance, high payload trucking, hydrogen and FCEVs appear likely to play an important role in the state’s transportation sector by 2030; the most obvious market is for heavy duty trucking, but possible demand for FCEVs in smaller truck and LDV segments could result in an even larger role for hydrogen overall.” (Report Page 5)*

2) It is very likely in the future that light-duty and medium-duty hydrogen vehicles will refuel at the same dispenser:

- Matt Miyasato, Ph.D., Chief Public Policy & Programs Officer, FirstElement Fuel; [Comment to Docket 24-ALT-01](#) (Page 1)

- *“There is a common misconception that MD trucks (Class 2b-6) will fuel with HD trucks at large stations, so MD is often linked with HD. Although this may occur, the more frequent operational behavior is that work trucks, package delivery vans, stake bed trucks, etc., will fuel at local neighborhood fueling stations. Indeed, these trucks will likely use the LD nozzle and receptacle as opposed to the high-flow, HD J2601-5 protocol.”*

- [California FCEV and Hydrogen Refueling Station Deployment: Requirements and Costs to 2050; Fulton, Lewis; UC Davis; April 1, 2024](#) (Page 6)

- *“We consider stations for LDVs and MDVs together, as we assume they can both refuel at the same type of stations with equipment sized to suit all the different vehicle classes up through Class 6.”*

3) Light-duty and medium/heavy-duty FCEVs have a [symbiotic relationship](#). All future hydrogen refueling stations serving commercial trucking should have dispensers for light/medium duty FCEVs, just like the existing truck stops of today:

- Katrina M. Fritz, President and Chief Executive Officer, California Hydrogen Business Council, [Comment to Docket 24-ALT-01](#) (Page 2)

- *“Enabling the infrastructure will enable the build out and up of the supply chain for all vehicle types: light-, medium-, and heavy-duty.”*

- [2024 Annual Evaluation of Fuel Cell Electric Vehicle Deployment and Hydrogen Fuel Station Network Development, California Air Resources Board, December 2024](#) (Conclusions and Recommendations – Page 21)

- *“The ARCHES program intends to fund stations for heavy-duty fuel cell trucks and transit fuel cell buses. The CTP funds could potentially be used to co-invest in select heavy-duty sites reducing the cost for light-duty stations by sharing hydrogen storage, gas compression, and/or on-site hydrogen production systems. Light-duty dispensers would be placed on publicly accessible adjacent properties.”*

- Matt Miyasato, Ph.D., Chief Public Policy & Programs Officer, FirstElement Fuel; [Comment to Docket 24-ALT-01](#) (Page 2)
 - *“... we urge the CEC to not abandon the LD fuel cell vehicle market. Three car manufacturers are already selling vehicles and others are poised to bring pickup trucks to the market in the next few years. Despite the conventional wisdom that “hydrogen only makes sense for HD trucks”, no HD vehicles are being mass-produced. The LD/MD market will create the supply chains and economies of scale needed for HD infrastructure. We urge the CEC to continue its leadership and support to enable hydrogen and fuel cell vehicles in all vehicle classes by prioritizing infrastructure for the vehicles that are already commercially available.”*