FIRSTELEMENT FUEL
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June 6, 2024

Mr. Adam Saul
Clean Fuel Standard Rule Lead
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Subject: Informal Comments on Proposed Rule Changes

Mr. Saul and Ecology Staff,

Thank you for the opportunity to comment on the proposed changes to the Clean Fuel Standard (CFS) Rule. FirstElement Fuel (FEF) is the largest retail hydrogen provider in California, with 41 hydrogen refueling stations (HRS) throughout the state. We also just recently commissioned the world's largest commercial heavy-duty hydrogen truck refueling station at the Port of Oakland. Our success is a direct result of the proactive climate policies that have been established in California under their Low Carbon Fuel Standard (LCFS), specifically the hydrogen refueling infrastructure (HRI) capacity credits provision. As we commented previously, we applaud Washington for mirroring much of the good work established in California. However, the light-duty station capacity crediting cap of 250 kg/day and medium and heavy-duty station crediting cap of 1,500 kg/d are much too low to incentivize and support the buildout of appropriately sized, commercial-ready hydrogen fueling stations.

Light-Duty (LD) HRI

We deployed our first-generation stations over a decade ago – these were all gaseous hydrogen stations with 250 kg/d capacities. These proved to be too small and were quickly overrun by customer demand, resulting in long lines and poor customer experience. Although we continue to operate these stations, they would never be economical by themselves. Since they are part of our larger network with higher capacity stations, we can spread the costs over our entire network. All of our current stations are 1,200 kg/d with four simultaneous fueling positions, which provide a similar refueling experience for customers switching from gasoline vehicles and minimize customers' wait times. These larger capacity stations depend on the California HRI program, at 1,200 kg/d capacity cap, which enables FEF to build stations today that will be economically self-reliant when fuel cell electric vehicle adoption reaches commercial levels. In addition, medium-duty trucks (class 2-6), announced by Stellantis and being demonstrated by Ford and GM, will fill at these same neighborhood refueling stations as they do now. These work trucks typically fill at local gas stations with LD vehicles, not the large travel center, class 8 truck stations off highway corridors. Limiting the LD HRI stations to such a small daily size will further disincentivize truck manufacturers to introduce these vehicles. We urge the staff to increase the capacity cap on light-duty stations to match California's program of 1,200 kg/d.

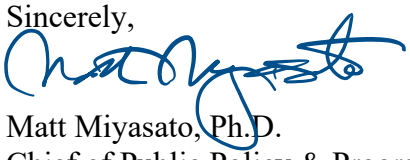
Heavy-Duty (HD) HRI

Our first HD truck station is 18,000 kg/d capacity, enabling the fueling of approximately 200 trucks per day with back-to-back fills under 10 minutes per fill. This scale is needed to provide the seamless user experience and low fueling times demanded by fleets. We recognize that the HD HRI program cannot credit the entire station capacity, so have worked with CARB to propose a cap of 3,000 kg/d. The current WA CFS cap is only 1,500 kg/d, which is even lower than our LD stations. In order to fill fleets and vehicles at the scale needed for commercial viability, larger stations are needed. We urge the state to increase the capacity cap to match California's program at 3,000 kg/d.

Summary

FEF appreciates the opportunity to comment on changes to the Clean Fuels Program. We have learned a lot about scale and economics through the first 10 years of the California LCFS program and recommend Washington to take advantage of the lessons learned. We would be happy to discuss these recommendations in more detail and look forward to working with you to make the Clean Fuels Program a success.

Sincerely,



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