August 9, 2021

Elena Guilfoil
Department of Ecology Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

RE: **Nikola Comments – Rulemaking – Proposed changes to Chapter 173-423 WAC Low Emission Vehicles**

Dear Ecology Air Quality Program Staff:

Nikola Corporation ("Nikola") appreciates this opportunity to submit comments in support of Washington's adoption of California's Advanced Clean Trucks ("ACT") regulation. Greenhouse Gas ("GHG") emissions from transportation account for about 28% of total GHG emissions in the United States, with commercial trucks contributing an astounding 23% of the total carbon emissions emitted from the transportation sector, followed by passenger vehicles[1]. As a designer and manufacturer of zero-emission battery-electric and hydrogen fuel cell electric vehicles ("FCEV"), electric vehicle drivetrains, vehicle components, energy storage systems, and hydrogen station infrastructure, Nikola is driven to revolutionize the economic and environmental impact of commerce as we know it today. Motor vehicles are the largest source of air pollution in Washington: transportation contributes about 22% of total air pollution, and 45% of greenhouse gas emissions throughout the state. We encourage the Washington State Department of Ecology to include both BEV and FCEV zero-emission ("ZE") technologies as it considers future implementation of clean truck policies.

Overview

The aggressive standards set by the ACT rule will go a long way toward advancing Washington's objectives to reduce GHG emissions, improve air quality (especially in disadvantaged communities), and transition the medium- and heavy-duty transportation space to green well-paying jobs. This rule is a critical precondition for a well-functioning medium- and heavy-duty zero-emission vehicle ("MHD ZEV") market. Nikola strongly supports adoption of the ACT rule by Washington State and the other signatories to the MHD ZEV Memorandum of Understanding signed in July 2020. Adopting the ACT rule signals to manufacturers ("OEMs") like Nikola that their respective MHD ZEV technologies will receive priority in Washington to combat GHG emissions and the state's air quality objectives. This is perhaps the single most integral action that a state can take to galvanize the development and maturation of a MHD ZEV market, however, as discussed below, the current rule is unlikely to reach its desired scale of impact without the necessary support of complementary "ecosystem" policies.

[1] https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

Additional Policies and Investments

It is critically important that Washington State enact manufacturer sales targets for MHD ZEVs. This will advance Washington's market leadership and will also send a decisive signal that ZE trucks and buses will become mainstream by 2030 and dominant before 2040. Furthermore, the ACT rule is most likely to succeed if it is included as one part of a suite of policies including: fleet purchase requirements to spur market adoption of ZEVs currently under development, strong and sustained point-of-sale purchase incentives to drive market transformation and, commitment by other state agencies to implement supportive infrastructure policy.

- Nikola strongly encourages the following actions to be taken in concert with the ACT rule for it to be successful:
    - Adopt fleet purchase requirements that mirror the sales targets in the ACT rule, upon final publication of the Advanced Clean Fleets rule by the California Air Resource Board ("CARB"). Immediately after finalizing the ACT rule, CARB staff began developing a complementary fleet rule called Advanced Clean Fleets.[2]
    - Create a ramp up to the rule via sustained and sufficient investments in incentives for the up-front costs of zero-emission trucks and the infrastructure required to support these trucks; and
    - Ensure competitive electricity rates for hydrogen production and MHD ZEV charging by developing electricity rates that minimize demand charges and enable the use of on-site renewable energy.
    - Develop a wholesale electricity market, and enable wholesale market participation for electrolytic hydrogen producers, which will provide the means for both low cost hydrogen production as well as the deployment of additional renewable energy generation to support the increased electricity demand relating to ZEVs.
    - Allow utilities to rate base capital investments without customer-required up-front payments for make-ready electric infrastructure investments to speed interconnection for BEVs, hydrogen production and fueling facilities.
    - Allow siting of hydrogen pipelines along existing rights of way for natural gas pipelines, and support transmission interconnections and rights of way for electrolytic hydrogen production facilities.
    - In implementing the Clean Fuel Standard, ensure that funding can be directed towards the deployment of hydrogen fueling and EV charging infrastructure to allow for scale within infrastructure funding programs that can support hundreds of trucks per day at public fueling stations by eliminating per station cost caps or targeting cost caps to a $/truck served or $/energy potentially dispensed metric.
    - Support infrastructure upgrades along roads and freeway exits to enable freight vehicle movement to new hydrogen fueling stations.

[2] https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets

- Encourage demonstration pilots with utilities and fleets in Washington for BEV charging and hydrogen FCEV use to inform development of advantageous rates, demonstrate emissions reductions, and encourage fleet adoption.

Incentives

- Incentive programs could jumpstart market transformation by giving fleets the funding required to become early adopters of ZEVs and help manufacturers reach production scale. However, ZEV adoption must extend well past early adopters for Washington to reach a 30% MHD ZEV sales target by 2030. This requires not only sustained incentive availability beyond currently available funding in these programs, but also a transition to more flexible and innovative models that can effectively channel incentive dollars into resale MHD markets, where many small and minority-owned fleets procure new trucks.
- Many of the baseline assumptions in CARB's ACT rulemaking—regarding total cost of ownership and price parity over time—relied on the assumption of ongoing incentives and low fueling costs supported by California's Low Carbon Fuel Standard program, which reduces the effective operating cost for MHD ZEVs and commercial EV rates adopted by the California Public Utilities Commission.
- The impact of the Low Carbon Fuel Standard and EV rates is critical, especially during early stages of market adoption. Just as CARB determined that sustained incentives are required to support the business case for MHD ZEVs in California, Washington should assume similar incentive support will be needed for its own MHD ZEV market. Importantly, such sustained incentive support can and should step-down with time to keep pace with technological improvement as OEMs increase production volumes and costs reduce in parallel with technology cost curves.
- The development of federal incentives, such as a national "point of sale" purchase incentive, inclusion of hydrogen within the EPA's Renewable Fuel Standard program, and infrastructure-related tax credits could be a game-changer for the ZEV industry and remove the pressure on states as being the sole source for driving down the price of vehicles and proving market readiness.

We appreciate Washington's leadership to adopt policies like the ACT which will complement recently passed legislation, including the Climate Commitment Act and Clean Fuel Standard. These actions will accelerate the deployment and market adoption of zero-emission heavy-duty trucks and infrastructure and help the state reach net zero emissions by the middle of the century. Nikola looks forward to working with the Department of Ecology and other stakeholders in Washington State to inform this process and support the state's zero-emission transportation objectives.

Sincerely,
Alana Langdon
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