Lucid USA, Inc.

Please see the attached file for Lucid USA, Inc. comments on the rulemaking – Clean Vehicles Program and General Regulations for Air Pollution Sources.



October 19, 2022

Adam Saul Department of Ecology Air Quality Program P.O. Box 47600 Olympia, WA 98504

Re: Lucid USA, Inc. Comments on the Rulemaking – Clean Vehicles Program and General Regulations for Air Pollution Sources

Dear Mr. Saul:

Lucid USA, Inc. ("Lucid") appreciates the opportunity to comment on the proposed rulemaking regarding the Clean Vehicles Program and General Regulations for Air Pollution Sources. We are excited for Washington to begin discussing adopting California's Advanced Clean Cars II (ACC II) rule as a means to increase zero-emission vehicle (ZEV) adoption in Washington State.

Our comments are summarized as follows:

- The Department of Ecology ("Ecology") should mandate higher new ZEV sales in the proposed regulation in at least 2026-2030 to accelerate the transition of ZEVs in Washington more quickly.
- Pooling should be eliminated as a compliance mechanism in ACC II to increase the number of ZEVs in Washington.
- Early Action ZEV Credits will be most impactful when paired with increased mandated new ZEV sales.
- Ecology should create an "Exceptional Efficiency Credit" category where ZEVs with greater battery efficiency are eligible to generate an incremental 0.5-ZEV credit.

About Lucid

Lucid is an American electric vehicle manufacturer with headquarters in Newark, California. The Lucid Air is the world's most powerful and efficient electric sedan with a range of 520 miles, the fastest recharge speed in the industry (300 miles in 22 minutes at a 300+ kW charger), and the first commercially available vehicle to be vehicle-to-grid capable. We have a clear vision for transitioning our market-leading technology to mainstream market segments. Importantly, our technology leadership – especially on efficiency – will be key to enabling electrification of the heavy-duty sector and unlocking low-cost, mass market, no-compromise ZEVs.

Accelerating the ZEV value requirement, especially in 2026-2030, will drive sales beyond business as usual

As Lucid commented on the California Air Resources Board's ACC II rulemaking,¹ the proposed stringency of the regulation (i.e., mandated ZEV sales through 2035) appears to be low, which would result in a market for credits that is unlikely to materialize in any significant way under ACC II. Washington can remedy this shortfall in California's ACC II, thus preventing an unnecessary limiting of Ecology's ability to influence automaker behavior beyond the minimum technical and ZEV assurance requirements through its own ACC II program.

Rather than lagging automakers' planned activities, Washington's ACC II should strive to accelerate the transition to ZEVs to match the state's Clean Cars 2030 goal. This enables Washington's program to work in parallel with the Move Ahead Washington package passed in 2022, which codifies that all new cars registered in the state be electric by 2030. We therefore encourage Ecology to consider a regulation with constant percentage point increases in stringency over its lifetime to reach a ZEV value requirement of 100% in 2030.

Pooling is a detriment to the regulation and reduces emissions benefits in Washington

We encourage Ecology to eliminate pooling as a compliance mechanism in ACC II. As ACC II sets Washington and Section 177 states on an accelerated path to 100% ZEV sales, it is time to support actual ZEV deployments in all states. Pooling creates a mechanism that allows Section 177 states to lag in adoption specifically because manufacturers have an avenue to exceed their requirements in California. Further, as noted above, the proposed regulation sets sales requirements at or below current levels, suggesting automakers are already well-positioned to deliver the required number of vehicles in any given state. Washington should avoid embracing a policy that will create conflict with its own ZEV goals by allowing overcompliance in California.

Added credit values for early action are only impactful if enacted in parallel with increased stringency

We believe Early Action ZEV Credits can be a powerful tool and an important part of the regulation to accelerate ZEV sales and emissions outcomes. However, rather than simply being used as a concession to automakers, they should result in the continued raising of the bar by adjusting the stringency accordingly.

Exceptional Efficiency Credits, worth an additional 0.5 ZEV credits, can accelerate adoption of ZEVs while reducing their environmental impact

ZEV efficiency is the single most important parameter Ecology can influence to reduce the cost and environmental impact of ZEVs. Improved ZEV efficiency delivers the same benefits as it does for conventional vehicles, including less environmental impact, enhanced national security, and lower operating costs. Given the clear and broad benefits of ZEV efficiency, we

¹ Witt, Daniel. Lucid Motors. *Lucid Motors CA ACCII Comments*. May 31, 2022. https://www.arb.ca.gov/lispub/comm/iframe_bccomdisp.php?listname=accii2022&comment_num=468&virt_num=154

encourage Ecology to proactively design ACC II to promote ZEV efficiency. While Lucid prioritizes efficiency in our vehicle designs, Ecology should not assume the market will prioritize or reward ZEV efficiency on its own. Therefore, we strongly encourage Ecology to take steps to reward ZEV efficiency through ACC II.

Unlike conventional vehicles, where improved efficiency tends to increase production costs, ZEV efficiency can *seed a virtuous cycle*. Efficiency lowers vehicle production costs and purchase prices by reducing the number of batteries needed to achieve a targeted range. Fewer batteries lower vehicle curb weight due to smaller battery packs (battery modules are generally the heaviest and costliest component in an electric vehicle), which can thereby further reduce the required cell count to achieve a desired range. Furthermore, fewer batteries reduce the cost of the battery pack itself by lowering demand per vehicle for lithium and other critical materials. Efficiency consequently reduces electricity grid impacts, upstream emissions, and the amount of additional energy resources needed. It also reduces demand for lithium and critical materials, along with potential supply chain bottlenecks.

With added stringency to create a market for ZEV credits, Ecology can better advance an array of priorities through additional crediting opportunities to incentivize and advance ZEV efficiency. Specifically, we encourage Ecology to add a new crediting category for Exceptional Efficiency Credits, which would be worth 0.5 credits and available through at least the 2031 model year. ZEVs eligible under this category would have to be at least 50% more efficient than ACC II baseline assumptions that ZEVs have an average efficiency of 3.7 miles/kWh.²

Exceptional Efficiency Credits, like the Early Action ZEV Credits, would further support compliance flexibility, accelerated mass market adoption of ZEVs, and equity if coupled with a more stringent compliance requirement to ensure that actual ZEV sales required by the regulation outpaces automakers' planning at current levels.

Conclusion

Thank you again for the opportunity to comment on proposed ACC II regulations. To achieve the ambitious goal of 100% ZEV adoption, the State must consider additional measures – like direct-to-consumer or freedom-to-buy ZEV sales – which have already been proven to positively impact EV adoption. Additionally, creating a secondary marketplace for ZEVs will ensure they're attainable for the widest possible audience. These additional measures not only align with enhanced stringency in earlier years but also leverage used EVs as a key method for achieving full ZEV deployment.

We appreciate the public engagement in this process and the efforts of Ecology staff to develop a thoughtful, deliberate rule that catalyzes the transition to 100% ZEV sales. As you finalize the

² Advanced Clean Cars II – Proposed Amendments to the Low Emission, Zero Emission, and Associated Vehicle Regulations. Standardized Regulatory Impact Assessment (SRIA). https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/appc1.pdf.

rule, we hope you will consider the additional modifications proposed here to usher in a widespread, shared transition to ZEVs in Washington.

Respectfully submitted,

Lillian Mirviss Manager, State & Local Public Policy Lucid USA, Inc.