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Clerk of the Board  
California Air Resources Board  
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**Re: Strengthening the Proposed Advanced Clean Fleets (“ACF”) Rule**

Rivian Automotive, LLC, (“Rivian”) appreciates this opportunity to comment on the latest draft regulation for the ACF rule. The ACF regulation represents significant ambition on the part of the California Air Resources Board (“CARB”) and would serve as an important demand-side companion to the Advanced Clean Trucks (“ACT”) rule. Rivian endorses the goals of the ACF rule but reiterates our view, outlined in our previous comments on this matter, that certain aspects of the proposal blunt the regulation’s potential. While we generally support staff’s recommendations, we encourage CARB to seek modifications to the proposed rule by sunseting provisions allowing for the use of “Near Zero-Emission Vehicles (“NZEVs”)” to demonstrate compliance, and by setting a target for 100 percent medium- and heavy-duty (“MHD”) ZEV sales earlier than 2040.

## Keep the World Adventurous Forever

Founded in 2009, Rivian is an independent company headquartered in California where we maintain office locations in Irvine and Palo Alto, as well as customer-facing service centers in several cities. With approximately 5,000 employees across the state and more than 14,000 around the world, it’s Rivian’s mission to Keep the World Adventurous Forever. Rivian’s focus is the design, development, manufacture, and distribution of all-electric adventure vehicles, specifically pickups, sport utility vehicles, and commercial vans. Key to the success of our mission, these vehicles will displace some of the most polluting vehicles on the road today.

Rivian brought the first electric truck to market last year when we launched the R1T pickup from our manufacturing facility in Normal, Illinois, followed shortly thereafter by the R1S SUV and a commercial fleet electric delivery van for Amazon. All our vehicles are considered medium-duty (“MD”) for regulatory purposes and satisfy ZEV requirements under both the Advanced Clean Cars II (“ACCI”) and the ACT rules. The R1T and R1S provide all-electric options in segments where added utility is a necessity. The R1T has an EPA-certified 314-mile range and 11,000lbs of towing capacity, while the R1S is a seven-passenger full-sized SUV with a 316-mile range; both are more capable than the conventionally powered vehicles they are displacing. Rivian is also building a network of DC fast and Level 2 chargers across the country, including sites on public lands such as the Golden Gate National Recreation Area and Yosemite National Park.

## Rivian Generally Supports the ACF but Continues to Believe CARB Should Make Certain Changes to Strengthen the Regulation

Rivian supports the most ambitious possible policies and regulations to reduce emissions and grow the ZEV market. ACF is an important complement to ACT and can help accelerate the MHD ZEV transition in California. The rule promises to introduce demand certainty to the MHD ZEV market and play a central role in the state's strategy for achieving air quality improvements and greenhouse gas emissions reductions.

However, our analysis of the Initial Statement of Reasons ("ISOR") and proposed regulatory text finds that the proposal could be stronger in several key respects.

### Lack of Credit Trading Mechanism Represents a Missed Opportunity

**In a departure from typical CARB practice for regulations of this kind, the ACF proposal does not allow participants to earn, average, bank, or trade compliance credits.** Averaging, banking, and trading ("ABT") provisions are a proven mechanism for delivering emissions reductions in regulatory programs ranging from ACT to federal light-duty greenhouse gas emissions standards. ABT allows for the most stringent and environmentally beneficial standards for a given technology and implementation cost. Compared to the approach currently proposed by CARB, which allows for compliance exemptions and extensions, an ACF rule with an ABT program would also be more likely to deliver emissions reductions in a timely manner. Unlike the proposed extension/exemption regime, an ABT program incentivizes overcompliance and makes it possible, on average, for the aggregate fleet to achieve its goals even if individual fleets face unique barriers in any given compliance year. To the extent that fleets in a position to over-comply with the regulation operate in communities disproportionately impacted by air pollution, the incentives created by a credit ABT mechanism could even accelerate deployment of ZEVs and the associated air quality benefits into locations that are disproportionately affected by truck tailpipe pollution. In our view, CARB will also find credit trading relatively easier to administer and oversee than an extension/exemption process whereby staff will need to scrutinize unique requests from a potentially large number of fleets. For these reasons, **CARB should reconsider the benefits of ABT within the ACF rule**, though we recognize the unlikelihood of such a significant structural change to the proposal at this stage. Rivian supports the inclusion of thoughtful extension and exemption provisions, such as those in the proposed regulation, but believes they would be more manageable and appropriate as backstops to an ABT mechanism.

### NZEVs Should Not Be Treated as Equivalent to ZEVs for Compliance Purposes

Consistent with our approach in all regulatory programs, **Rivian believes it is inappropriate for policies to treat NZEVs as equivalent to ZEVs.** This would erode the environmental integrity of the program, as well as its function as a source of demand certainty for "end-state" ZEV technology. To maximize emissions reductions and the benefits of the ACF, CARB should phase out regulatory credit of any kind for vehicles that do not deliver zero tailpipe emissions. To the extent that CARB finds it necessary to allow for NZEVs as a form of compliance flexibility, a credit ABT framework would facilitate fairer treatment of such vehicles. For example, CARB could proportionally credit NZEVs used for ACF compliance at a value that reflects their greater in-use emissions versus true ZEVs. This represents yet another compelling reason to use a credit-trading approach for ACF compliance. Absent a credit ABT framework, at a minimum, **Rivian recommends that CARB establish a sunset date—no later than 2030—after which fleets may not rely on NZEVs to satisfy requirements under the rule.**

## Require 100 Percent MHD ZEV Sales by 2036

Rivian appreciates California's efforts to enhance the state's ZEV sales requirements on manufacturers to help meet electrification and climate goals. **However, the current requirement of 100 percent MHD ZEV sales in 2040 could be more ambitious.**

Not only are MHD ZEVs technologically feasible across all MHD classes, but the ownership economics for these vehicles continues to improve. Extensive analysis finds that by 2030, ZEVs will offer a total cost of ownership advantage versus combustion alternatives in every MHD class.<sup>1</sup>

Requiring 100 percent MHD ZEV sales in 2036 would also align California's regulations with the goals and targets of both the Mobile Source Strategy ("MSS") and the Scoping Plan. In fact, the scenario staff developed for the MSS assumes 100 percent ZEV sales "for all vehicle categories" beginning in 2035, while the modeling in support of the Scoping Plan's preferred alternative assumes 100 percent ZEV sales at least in the medium-duty segment in 2036. Even then, the preferred alternative still results in substantial residual emissions economywide through the target year of 2045.<sup>2</sup> Allowing manufacturers to continue selling MHD combustion vehicles until 2040 will extend the life of an entirely avoidable source of emissions and only make it more difficult for the state to achieve its required air quality improvements and GHG reductions.

Moreover, in its consideration of "Alternative 2," the ISOR itself does not persuasively reject the provision requiring 100 percent MHD ZEV sales in 2036. It focuses instead on challenges pertaining more specifically to increasing the ambition of the ZEV milestones pathway and expanding obligations to high priority and federal fleets with ten tractors or more.<sup>3</sup> The ISOR argues that these aspects of Alternative 2 could create market imbalances between ZEV sales and purchases in the early years, plus compliance burdens for smaller fleets. Insofar as these concerns are reasonable, they do not extend to the sales mandate. Requiring 100 percent MHD ZEV sales in 2036 would clearly not introduce the same risks.

Overall, accelerating the 100 percent MHD ZEV sales requirement seems defensible, prudent, and necessary. **CARB should direct staff to revise the proposed regulation to require 100 percent MHD ZEV sales in 2036.**

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<sup>1</sup> Advanced Clean Fleets Coalition, Comments Submitted "Re: Follow-Up Resources Supporting 100% Sales Target in 2036" (February 11, 2022), available at [www.arb.ca.gov/lists/com-attach/193-acf-comments-ws-B2FTOIc6AD8EbVQj.pdf](http://www.arb.ca.gov/lists/com-attach/193-acf-comments-ws-B2FTOIc6AD8EbVQj.pdf).

<sup>2</sup> California Air Resources Board, *2020 Mobile Source Strategy* (October 28, 2021), 140; California Air Resources Board, EMFAC, *Draft Mobile Emissions Toolkit for Analysis (META): On-Road Heavy-Duty Tool*, available at [www.arb.ca.gov/emfac/meta/on-road-hdv](http://www.arb.ca.gov/emfac/meta/on-road-hdv), last accessed October 17, 2022; Energy and Environmental Economics, California PATHWAYS Model Outputs (May 2, 2022), spreadsheet available at [www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents](http://www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents).

<sup>3</sup> California Air Resources Board, *Public Hearing to Consider the Proposed Advanced Clean Fleets Regulation, Staff Report: Initial Statement of Reasons* (August 30, 2022), 253.

## Conclusion

Rivian's mission to Keep the World Adventurous Forever is made manifest in our commitment to the environment and addressing climate change. We strongly support the most ambitious regulatory programs to reduce emissions and achieve 100 percent ZEV transition as soon as possible, of which ACF can be a leading example. To strengthen the rule, we encourage CARB to revise the rule's treatment of NZEVs and to accelerate the 100 percent MHD ZEV sales target as necessary to align California's regulations with the expectations and requirements of the MSS and Scoping Plan.

Please reach out to me with any questions about these comments. We look forward to the Board's consideration of the proposal and the remainder of the rulemaking process.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom Van Heeke".

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