



July 28, 2022

Clerk of the Board  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

SUBMITTED ELECTRONICALLY AT: [www.arb.ca.gov/applications/public-comments](http://www.arb.ca.gov/applications/public-comments)

**Re: Notice of Public Availability of Modified Text and Availability of Additional Documents and Information for the Proposed Advanced Clean Cars II Regulations**

To Members of the California Air Resources Board (“CARB” or “the Board”),

Rivian Automotive, LLC, (“Rivian”) appreciates this opportunity to comment on the modifications to the proposed Advanced Clean Cars II (“ACCII”) regulations released on July 12, 2022, for 15-day comment (“15-day changes”). The development of the ACCII proposal is just the latest example of California’s continued leadership in transportation electrification and climate action that is recognized across the country and around the world. Rivian strongly supports the proposed regulation’s direction and California’s efforts to accelerate transportation emissions reductions and zero-emission vehicle (“ZEV”) uptake.

We appreciate the constructive dialogue we have had with staff on several issues in recent weeks and months. Staff dedicated significant time and effort to discussing items in the proposed regulations. We applaud the modifications that maintain the existing regulation’s credit-earning flexibility for medium-duty zero emission vehicles (“MD ZEVs”) under the ACCII program. Staff have also taken steps to pragmatically refine the proposed battery durability standards. However, Rivian remains disappointed to see modifications providing proportional crediting for fuel cell electric vehicles (“FCEVs”), which we believe will only serve to weaken the regulation’s effective stringency without delivering meaningful benefits for ZEV market development.

### **Keeping 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 12,000 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 passenger vehicles and trucks 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

for regulatory purposes and satisfy ZEV requirements under both ACCI and the Advanced Clean Trucks rule (“ACT”). The R1T and R1S provide all-electric options in segments where added utility is a necessity. The R1T has an EPA-labeled 314-mile range and 11,000lbs of towing capacity, while the R1S is a seven-passenger full-sized SUV; both are well-equipped to displace the less-capable, yet similar, conventionally powered vehicles. 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 Believes Several of the 15-Day Changes Improve the Proposed ACCII Regulations

Rivian applauds California’s efforts to accelerate transportation emissions reductions and zero-emission vehicle uptake. The proposed ACCII regulation is an important part of those efforts. Overall, we remain strongly supportive of the draft regulation’s direction and goals. Many of the 15-day changes improve the draft regulation in some important respects, better aligning it with CARB’s objectives.

### Credit-Earning Optionality for MD ZEVs

The existing Advanced Clean Cars (“ACC”) regulation certifies as ZEVs “passenger cars, light-duty trucks, **and medium-duty vehicles**” (emphasis added) that meet the requirements of the ZEV emission standard.<sup>1</sup> In combination with the Advanced Clean Trucks (“ACT”) regulation, manufacturers of MD ZEVs have the option to earn credits under either ACCI or ACT, but not both.<sup>2</sup> In meetings with staff, Board members, and in our comments to date, Rivian has advocated strongly that ACCII should preserve this option to earn credits for MD ZEVs. Doing so will incentivize MD ZEV sales in Section 177 states that do not adopt the ACT as well as the migration of ACCII’s ZEV assurance measures to the MD classes. We welcome the 15-day changes to preserve the option for MD ZEVs to earn credits and encourage the Board to finalize the ACCII regulations with this provision.

### Battery Durability

Rivian has previously indicated support in principle for in-use battery durability standards and transparent battery health but cautioned against the proposed requirements in the Initial Statement of Reasons (“ISOR”). Overly stringent battery durability standards are likely to force reserve capacity and thereby increase vehicle cost (both new and used), obscure true battery capability, and decrease vehicle performance with added weight. And the associated enforcement provisions would expose manufacturers to potentially cost-prohibitive corrective actions for failure to clear very demanding thresholds. Alongside all of industry, Rivian expressed concerns in written comments and in testimony at the hearing on June 9 that the initially proposed requirement to maintain 80 percent battery state of health would force manufacturers to build in reserve capacity in the early years, especially for heavier, more capable, vehicles.

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<sup>1</sup> 13 CCR §1962.2.

<sup>2</sup> 13 CCR §1963.2(i).

We greatly appreciate the extensive engagement with staff on this issue in recent weeks. Compared to the ISOR, the 15-day changes represent an improvement. While we continue to believe that enforcement of a durability standard in the regulation’s early years—as opposed to a “data gathering” provision only—is premature, the 15-day changes represent meaningful movement toward a more practicable standard with a more appropriate approach to enforcement and test sample composition. Rivian supports the Board’s adoption of these provisions.

### Early Compliance and Converted Vehicle Values

The alignment of conversion rate for PHEVs and BEVs is appropriate to prevent PHEV credits from retaining a relatively greater value post-2025, and we support the proposal to add flexibility to converted vehicle values through optional cumulative allowance pathway. But considering this new flexibility and the substantial existing credit balance in California, Rivian also suggests increasing the discount factor. Since many of the vehicles delivered prior to Model Year 2026 will not meet the assurance measures proposed under this rulemaking, yet will earn up to 4 credits per vehicle, Rivian advocates for a greater discount factor closer to 4.

Rivian also broadly supports efforts to smooth ACCII adoption for section 177 states through early compliance vehicle values (“ECVV”). In general, Rivian believes early credit provisions in ZEV programs represent sound public policy, accelerating ZEV sales and the accompanying climate and quality benefits. We anticipate that manufacturers will have the option to choose between earning ACCI credits and ACCII ECVVs in several states, and accordingly find it appropriate that ECVVs can be earned by vehicles following the requirements under Section 1962.2 rather than those proposed for Section 1962.4. Given their analog to converted vehicle values, CARB should consider allowing ECVVs to remain valid for five model years or until Model Year 2030 (whichever comes first). We also note that converted ACCI values could have greater value than ECVVs. For example, a Model Year 2025 ZEV earning 4 credits under ACCI would convert those credits at a value of 1.9 and with a credit expiration of 2030, while the early sale of an ACCII ZEV would only earn 1 ECVV with expiration in 2028. If CARB’s goal is to equalize ECVVs and converted values, the Board will need to consider additional actions.

### Proportional Credits for FCEVs are Misguided

Despite the improvements described above, we note our disappointment in the proportional crediting provisions crafted uniquely for FCEVs, which we view as counterproductive. Rivian generally opposes proportional crediting because proportional credit schemes double-count ZEVs, erode the incentive to sell vehicles in states outside California, and fail to support the policy’s local air quality objectives. Provisions granting proportional credits to FCEVs only is additionally problematic because it singles out one technology for special treatment, justified by an assumption that fueling infrastructure and mainstream market success for FCEVs are both just around the corner. Ostensibly, a unique proportional crediting scheme for FCEVs would support certain automakers as they continue to invest in nascent technology.

However, we believe that passenger vehicle market conditions do not warrant special public support for FCEVs when viable alternatives have firmly taken root. Prospects for mass

commercialization of passenger FCEVs remain as difficult to discern in 2022 and as they did in 2012. Despite generous incentives that exceed those of peer technologies, sales of FCEVs remain negligible while BEVs have clearly won over consumers and investors as the predominant powertrain of a decarbonized future in the passenger vehicle market.<sup>3</sup> In this context, allowing for proportional credits for FCEVs weakens the ACCII regulation's stringency with only highly uncertain market development benefits promised in return. Rivian recommends that CARB finalize ACCII without the proportional credit flexibility for FCEV manufacturers.

## 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 sales as soon as possible, of which ACCII is a leading example. We applaud the continued leadership of California and CARB in pushing the ZEV industry forward. Rivian believes the 15-day changes generally improve the proposed ACCII regulations. Specifically, modifications to allow MD ZEVs to earn credits under the program and modifications that enhanced the practicability of the battery durability requirements strengthen the policy. Provisions governing early credits and converted values also appear reasonable. We encourage the Board to finalize ACCII with these modifications in place.

We are disappointed, however, with the 15-day changes instituting a proportional credit scheme for FCEVs. This will only serve to weaken the program's stringency. Underlying market dynamics suggest strongly that these credits will not advance any compelling market growth interest.

Once again, we thank staff for their hard work in developing this regulation and their commitment to dialogue with stakeholders throughout the process. The 15-day changes reflect thoughtful and constructive engagement. Thank you for the opportunity to comment and we look forward to the Board's final consideration of the proposed regulations.

Sincerely,

Chris Nevers  
Senior Director of Public Policy  
Rivian Automotive, LLC

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<sup>3</sup> Between January 2011 and January 2022, slightly less than 10,825 FCEVs were sold in California. Over the same timeframe, Californians bought almost 655,000 BEVs, per Alliance for Automotive Innovation, *Electric Vehicle Sales Dashboard*, <https://www.autosinnovate.org/resources/electric-vehicle-sales-dashboard> (last visited Jul. 22, 2022).