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Re: Comments in Support of the Proposed Rulemaking to Adopt 06-096 C.M.R. Chapter 127-A, Advanced Clean Cars II Program, and 06-096 C.M.R. Chapter 128, Advanced Clean Trucks Program

Rivian Automotive, LLC, ("Rivian") is pleased to comment in support of the proposed rulemaking to adopt both the Advanced Clean Trucks ("ACT") Program and the Advanced Clean Cars II ("ACCII") Program (formally noticed as 06-096 Chapter 128, Advanced Clean Trucks Program, and 06-096 Chapter 127-A, Advanced Clean Cars II Program, respectively). Rivian strongly supports Maine's proposed actions as part of a comprehensive strategy for addressing climate change and improving air quality in the state, building on Maine's track record of leadership in this area. Maine already enforces the ACCI light-duty standards for zero-emission vehicles ("ZEVs")—the precursor regulatory program to ACCII—and is a signatory to the Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding ("MOU"), a document that laid the foundation for the ACT program. The proposed rules will build on this legacy of action and help deliver on the state's transportation electrification goals as outlined in the action plan of the Maine Climate Council.¹ Maine law also establishes mandatory decarbonization targets and directs the Department of Environmental Protection ("DEP") to ensure compliance and prioritize emissions reductions from the most polluting sectors.² The proposed vehicle emissions standards are crucial tools at the disposal of DEP and the state in meeting the requirements prescribed by statute. To ensure Maine realizes the maximum benefits of the rules, DEP should carefully review the proposed regulatory language for consistency with the intent of the rules and implement any additional conforming edits to the incorporated regulation as necessary.

Keep the World Adventurous Forever

Founded in 2009, Rivian is an independent U.S. company headquartered in California. With over 14,000 employees across the globe, Rivian's mission is 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 ("SUVs"), and commercial vans. Key to the success of our mission, these vehicles will displace some of the most polluting conventional vehicles on the road today.

Rivian brought the first modern electric pickup to market in 2021 when we launched the R1T from our manufacturing facility in Normal, Illinois, followed shortly thereafter by the R1S SUV and the EDV commercial van for Amazon. The R1T and R1S—both medium-duty passenger vehicles ("MDPVs")—

¹ Maine Climate Council, *Maine Won't Wait: A Four-Year Plan for Climate Action* (December 2020), available at <a href="https://www.maine.gov/climateplan/sites/maine.go

² 38 M.R.S. §576-A.

provide all-electric options in segments where added utility is a necessity. The R1T and R1S both have an EPA-certified range of up to 352 miles. The truck also features 11,000lbs of towing capacity, while the R1S is a seven-passenger full-sized SUV. Both are well-equipped for off-roading in a range of climates. Separately, our Class 2b and 3 commercial vans eliminate tailpipe emissions from last-mile delivery. Rivian is committed to producing 100,000 vans for our launch customer, Amazon. They currently operate the first several thousand EDVs in more than 800 U.S. cities where they have already delivered tens of millions of packages emissions-free.

In addition to our vehicle lineup, Rivian is also building a network of DC fast chargers across the country.

Rivian Strongly Supports Maine's Adoption of the Most Stringent Vehicle Emissions Regulations

Rivian's mission to Keep the World Adventurous Forever is made manifest in its commitment to the environment and addressing climate change. We strongly support programs of ambitious emissions regulation ZEV sales requirements as core to our values and vision for the world. Implementation of the full suite of standards proposed for Chapter 127-A and 128 will drive critical reductions in GHG emissions and air pollution in Maine, while rapidly growing the state's ZEV market. ACCII will begin fully transitioning Maine's passenger vehicle market to 100 percent ZEV sales, though as currently proposed it will stop short at the Model Year ("MY") 2032 requirement of 82 percent. The ACT rule will require manufacturers to ensure that more than half of their Class 2b-3 sales, 75 percent of Class 4-8 sales, and 40 percent of Class 7-8 tractor new sales, are ZEVs by MY2035. Rivian's vehicles meet the requirements of both the ACCII and ACT standards and are proof that these regulations are achievable.

The ACCII and ACT Regulations are Feasible

Both rules were thoughtfully designed with feasibility in mind. For example, ACCII includes certain flexibilities such as allowances for credit pooling by obligated automakers. Both ACCII and ACT use averaging, banking, and trading frameworks for facilitating manufacturer compliance, a tried-and-tested approach that allows for the strictest possible rules and the lowest overall compliance costs for industry.

Establishing these requirements in the state will ensure Mainers are at the front of the line for new ZEVs. Moreover, the sales requirements bring certainty to the market, supporting investments in charging infrastructure and allowing for long-term grid planning by utilities. For these reasons, Rivian believes Maine's program would be even stronger if it included the requirements as finalized in California out to MY2035. While the proposal as drafted is a strong step toward the goal of 100 percent ZEV sales in the state, setting standards through just MY2032 unavoidably injects some uncertainty about the outyears into the market and risks scrambling the signal sent by the regulation. BEP should reconsider the important benefits of adopting the full ACCII regulation this year. In any case, we welcome the proposal to review the program by January 1, 2028, and look forward to that opportunity to advocate for a full extension to MY2035.

In the MHD sector, we see the ACT rule as a critical precondition for the market's success. With its strong yet achievable standards, vehicle class-specific sales targets, and provisions for credit trading, the

regulation is thoughtfully designed to support industry's compliance efforts while driving accelerated deployment of ZEVs by manufacturers. Adoption of ACT will help industry grow ZEV market share more quickly, which is crucial for the long-term success of the industry as well as Maine's transportation electrification efforts.

Ample evidence demonstrates the achievability of the ACT requirements in Maine.

- According to CALSTART, as of the first quarter of 2023 manufacturers offered 208 MHD ZEV models for sale in the United States and Canada.³
- In California, the first ACT state to begin credit reporting, vehicle makers earned more than 500 early credits in Model Year ("MY") 2021 alone, fully six model years ahead of Maine's likely implementation year. This reveals the emergence of a robust manufacturing infrastructure and product pipeline in the MHD industry that will only grow as more ZEV manufacturers, responding to customer demand and regulatory signals from rules like ACT, hit their manufacturing stride in the coming years.⁴
- The regulations would nominally require the sale of less than a thousand Class 2b3 ZEVs in Maine in MY2027, the first year of the program. The vehicles to meet this requirement already exist in the market today. In 2022, Rivian alone delivered almost 25,000 vehicles to customers nationwide and we expect to more than double production this year, with our official production guidance now at 52,000—all of which will be medium-duty vehicles that meet the requirements of the ACT standards. Amazon already operates more than 5,000 Class 2b EDVs across the country, while a diverse array of fleets—from fire departments to utilities to construction contractors—find that the R1T and R1S can also meet their work needs.

The Rivian product line exemplifies how EV technology can succeed in a variety of applications and settings, including Maine. Indeed, EVs now dominate vehicle markets in countries and regions around the world with extreme weather and demanding terrain, like Norway and Iceland. We look forward to seeing Maine's EV market grow in similar ways in response to the promulgation of these rules. For more responses to two commonly cited technical concerns regarding EVs, please refer to comments previously submitted by Rivian in response to the Board of Environmental Protection's ("BEP's") regulatory proceeding considering the ACT rule in the fall of 2021. We incorporate those comments by reference into this submission.⁶

Early Action Credit Provisions Will Accelerate the Benefits of the ACT Rule

As a vehicle manufacturer, Rivian wishes to stress the value of "early credits" under the ACT. Early credits

³ Owen MacDonnell, Yin Qiu, Shuhan Song, and Xiaoyue Wang, CALSTART, *Zero-Emissions Truck and Bus Market Update*, June 2023, available at www.globaldrivetozero.org/site/wp-content/uploads/2023/06/Final_ZETI-Report-June-2023 Final.pdf.

⁴ California Air Resources Board, *Advanced Clean Trucks Credits Summary*, March 31, 2022, available at: www.arb.ca.gov/sites/default/files/2023-02/ACTCreditMemo.pdf.

⁵ Rivian estimate based on estimates of Maine's Class 2b3 vehicle population, average annual turnover rates, and the ACT MY2027 sales requirement.

⁶ Tom Van Heeke, Rivian Automotive, LLC, *Re: Comments of the Maine Business Coalition on 06-096 Chapter 128, Advanced Clean Trucks Program, the Proposed Rule to Adopt California's Advanced Clean Trucks Program* (December 15, 2021), submitted by email to Lynne Cayting, Maine DEP.

allow EV makers to begin earning compliance credits ahead of the formal regulatory obligation and incentivize accelerated deployment of EVs in the state. Not only does this deliver critical air pollution and greenhouse gas emissions reductions sooner, with important benefits for public health and Maine's climate goals, but it can help industry grow more quickly to large-scale production and thus move component costs down the cost curve. This is crucial for the long-term success of the industry as well as Maine's transportation electrification efforts. Rivian welcomes Maine's intent to allow MHD ZEV manufacturers to earn early credits beginning in MY2024, as detailed in Section 1(B)(2) of Chapter 128 as drafted. MHD ZEVs are available today and Maine should use every available tool to establish itself as a priority market for those products as early as possible.

DEP Should Review the Proposed Regulatory Language for Chapter 128 to Ensure the ACT Rule will Take Effect as Intended

Chapter 128 incorporates by reference certain sections of the California Code of Regulations ("CCR"). DEP also proposes certain conforming edits to those regulations. However, Rivian is concerned that Chapter 128 does not include all the necessary changes to the CCR to ensure that the ACT rules will take effect as intended. Our analysis identified at least two points of potential concern.

• 13 CCR §1963.2. In its original form, the first sentence of 13 CCR §1963.2 reads, "Beginning with the 2021 model year, the following requirements apply:" This provision seems to control the entire section, governing credit generation under the ACT rule. But as drafted, Chapter 128 includes a conforming edit to the CCR replacing "2021" with "2027" in "all provisions" of CCR Title 13 with the specific exception of a single subsection, 13 CCR §1963.2(g). Thus, this edit would obtain in the sentence cited above with the potential implication that under the requirements of Chapter 128, 13 CCR §1963.2 would only allow credit generation beginning in MY2027. In Rivian's analysis, this conflicts with the intent to provide for early credit generation beginning in MY2024. To ensure that Chapter 128 authorizes early credits as intended, Rivian recommends DEP review the regulatory text and make additional conforming edits as necessary. This might include replacing "2021" with "2024" at the beginning of 13 CCR §1963.2 as follows:

Beginning with the 2021 2024 model year, the following requirements apply:

- 13 CCR §1963.1. This section of the CCR establishes the basic manufacturer requirements under the ACT and governs deficit generation. In its original form, §1963.1 establishes requirements that begin in MY2024:
 - (a) Deficit Generation. Starting with the 2024 model year, a manufacturer shall annually incur deficits based on the manufacturer's annual sales volume of on-road vehicles produced and delivered for sale...

While Chapter 128 is clear that it shall only apply to manufacturers of MHD vehicles in MY2027 or later, Section 3(B) also clearly states that, "In the event there are inconsistencies or duplications in the requirements of the provisions of the CCR sections incorporated herein and this Chapter, the provisions of the CCR shall prevail." Rivian has concerns that if the CCR supersedes any inconsistent provisions of Chapter 128, then the original form of 13 CCR §1963.1 could be

construed as operative in the state. In such a reading, manufacturer obligations under ACT would begin in MY2024 (i.e., immediately). Apart from being inconsistent with the intent of Chapter 128, this could also run afoul of lead-time requirements. DEP should review Chapter 128 and 13 CCR §1963.1 and make any changes or conforming edits necessary to ensure that the CCR is incorporated into Maine law in a manner consistent with the intent of Chapter 128 and a MY2027 start year for ACT obligations in the state.

To Enhance Maine's Transportation Electrification Efforts, the State Should Consider Complementary Actions to the Vehicle Emissions Rules

While not the subject of this proposal, Maine should consider complementary actions to strengthen its approach to reducing emissions from the transportation sector and help deliver on the goals of the regulations currently under consideration. For example, implementing a clean fuels standard (CFS) can create incentives for both EV deployment and use, as well as charging infrastructure investment.

Implement a Clean Fuels Standard (CFS)

CFS policies, also known as low carbon fuels standards (LCFS), are powerful enablers of transportation electrification in support of the requirements of the ACCII and ACT regulations.

Several states already establish carbon intensity standards for transportation fuels and many more are actively considering legislation to develop their own. This is a testament to the tremendous value clean fuels policies can deliver, and not just in terms of job creation and economic activity as fuel providers innovate and invest in producing and supplying clean fuels to the market. Just as important, they reduce emissions and are responsible for tens of millions of tons of avoided GHGs and co-pollutants in the states where they are already in force, supporting climate goals as well as improving air quality and public health. Because communities that border major highways and roadways are disproportionately affected by local air pollution caused by vehicles burning fossil fuels, they stand to benefit directly from the use of increasingly clean fuels on those same road networks.

CFS policies also serve to catalyze growth in the EV market. Designed correctly, CFS policies can establish incentive frameworks that encourage automakers to accelerate the development and sale of highly utilized EVs in the policy's territory while also creating new revenues via the trading of compliance credits that can be used to fund EV purchase rebates or other investments. These policies also reward investments in public charging infrastructure.

In the MHD sector, CFS policies create revenue streams that directly support fleet investments in electric vans, trucks, and buses. Under a CFS, when fleets charge vehicles centrally at a depot or dispatching center where they own the charger, they can capture the credits generated by the charging events. Selling those credits in turn generates revenue with direct benefits for total cost of ownership. In this way, CFS

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⁷ Oregon Department of Environmental Quality, Oregon Clean Fuels Program, available at www.oregon.gov/deq/ghgp/cfp/Pages/default.aspx; Casey Kelley and Nikita Pavlenko, The International Council on Clean Transportation, *Working Paper 2020-29: Assessing the potential for low-carbon fuel standards as a mode of electric vehicle support* (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available at the potential for low-carbon fuel standards as a mode of electric vehicle support (December 2020), available support (December

programs inherently incentivize MHD fleet-switching and the accompanying charger installation.

In the interest of cost-effective program administration and achieving greater scale, Maine could consider partnering with neighboring states to develop a regional CFS. The Transportation and Climate Initiative established a clear precedent for this kind of cross-state collaboration.

Conclusion

Rivian applauds efforts to reduce emissions and improve the environment by adopting the ACCII and ACT rules in Maine. Our products are proof that now is the time to adopt these regulations. Maine should also take steps to implement important complementary policies such as a clean fuels standard to maximize the impact of the state's efforts to electrify transportation.

Please contact me with any questions. Rivian looks forward to working with you to accelerate transportation electrification in Maine.

Sincerely,

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