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Clerk's Office

California Air Resources Board

1001 I Street, Sacramento, California 95814

ELECTRONIC MAIL TO: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Re: Rivian's Comments and Support of the Proposed Amendments to the
Proposed Advance Clean Trucks Regulation.

Thank you for the continued opportunity to comment on the proposed amendments to the Proposed Advanced Clean Trucks Regulation (ACT). I write on behalf of Rivian Automotive, LLC ("Rivian" or the "Company"). Rivian is an independent U.S. company dedicated to the mission of keeping the world adventurous forever through the introduction of a lineup of all electric adventure vehicles™, namely pickup trucks and SUVs. Part of our mission includes the term "forever". "Forever", in this instance, means sustainable. Our goal is nothing less than the complete electrification of on-road transportation and this includes the heavy-duty truck space.

Rivian employs over two thousand people in the U.S., Canada, and the United Kingdom and employment is expanding. Production is located in Normal, Illinois. U.S. Research and development locations include Carson, Irvine, Palo Alto, and San Jose, California; Plymouth, Michigan; and Vancouver, B.C. (Canada).

Rivian is backed by a number of strategic and institutional investors who have invested over \$3 billion in capital into the Company in 2019 alone. They include Amazon, Ford Motor Company, Cox Automotive, T. Rowe Price and Blackrock. In addition to the strategic investment by Amazon, Rivian will also be developing and building 100,000 last-mile delivery vehicles for Amazon. Although specifications are still being finalized for these last-mile delivery vehicles, Rivian expects to deliver tens of thousands of these Class 2b and Class 3 heavy-duty trucks before ACT requirements begin.

Rivian is also in the process of finalizing development and start of production capabilities for its first pickup truck (R1T) and SUV (R1S) medium-duty passenger vehicles that will be available for sale beginning in 2021. With features like an electric motor at each wheel, up to 400 miles of range on a single charge, 0-60mph times of 3.0 seconds

and the ability to tow up to 11,000 pounds, the R1 all electric vehicles will open-up a new class of zero emission vehicles to the consumer.

Rivian has an interest in this rulemaking and is a stakeholder active in making the proposed ACT program a success. Rivian respectfully submits these comments in support of the proposed amendments to the Proposed Advanced Clean Trucks Regulation.

Strong Need to Continue Support of a Clean Environment and Better Health

Given the recent COVID-19 outbreak and mitigating responses, California needs to send a strong signal that the heavy-duty electric vehicle market is a smart investment for vehicle manufacturers, infrastructure providers, and consumers. While Rivian still intends to deliver tens of thousands of heavy-duty electric trucks each year, with initial deliveries starting in calendar year 2021, electric vehicle programs of “conventional” stakeholders could be shaken if long-term environmental goals are weakened in the face of current challenges.

We appreciate California's unwavering resolve to maintain leadership in addressing air pollution. This is all the more important when one considers the added health impacts that unclean air has on those affected by respiratory diseases such as COVID-19. As numerous studies have shown, air pollution only exacerbates the deadly effects of the Coronavirus.¹ And with no effective vaccine available, it is imperative that California lead by doing all it can to limit the deadly impacts of the Coronavirus – including not going back to transportation pollution outputs commiserate with pre-COVID-19 levels.

Even without the compounding effects of COVID-19, air quality improvements corresponding to greater electrification are sorely needed. Indeed, the recent reduction in vehicle miles travelled has led to corresponding unprecedented positive impacts to the air as several articles and studies have shown.² Air quality improvements

¹ Lisa Friedman, “New Research Links Air Pollution to Higher Coronavirus Death Rates”, The New York Times (April 9, 2020), <https://www.nytimes.com/2020/04/07/climate/air-pollution-coronavirus-covid.html>

² Melissa Lunden and Meghan Thurlow, “The stunning impact of COVID-19 social distancing on air pollution”, Green Biz (March 31, 2020), <https://www.greenbiz.com/article/stunning-impact-covid-19-social-distancing-air-pollution>; Kasha Patel, “Airborne Nitrogen Dioxide Plummets Over China”, Earth Observatory, <https://earthobservatory.nasa.gov/images/146362/airborne-nitrogen-dioxide-plummets-over-china>; Ula Chrobak, “COVID-19 has cut air pollution in some countries—

such as those associated with a sharp but temporary decrease in vehicle miles traveled (vmt) could be achieved by a transition to an all-electric fleet without the associated economic impacts of decreased vmt. This is especially applicable to the heavy-duty truck segment where recent studies of air pollution levels in Los Angeles, CA demonstrate that reductions are not as significant as first believed because of the continued operation of trucks.³ Accordingly, the need for the ACT proposal is even stronger than before.

To these ends, the ACT proposal needs to be adopted as proposed or perhaps with increased stringency. Now is not the time to pull-back from environmental and health goals.

Support for General Requirements and ZEV Credit Changes

Rivian supports the ACT proposal with the changes to the updated ZEV sales percentage schedule (Table A-1), the weight class modifiers (Table A-2), and the early credit provisions. Rivian also suggests that, to the extent early credits are allowed under the proposed manufacturer ZEV requirements, any future complimentary fleet ZEV program should allow for similar early credits.

Request to Clarify Consequences Beyond Penalty Provisions

Rivian supports the penalty provisions in the ACT proposal. A penalty provision provides a clear signal to manufacturers as to the consequences of neglecting their responsibilities. However, the ACT could restate that paying a penalty provision is just one step a manufacturer must take if ZEV credit shortfalls are not addressed in a timely manner. A similar concern with the light-duty ZEV program has been addressed in the California Air Resources Board ZEV Regulation Tutorial for Model Years 2018 + presentation. The presentation and the May 16, 2016 webinar clearly specify that ZEV credits are still “owed” after the penalty provisions are met.⁴ The ACT regulation should

but will this blip make a difference?, Popular Science(March 30, 2020),
<https://www.popsci.com/story/environment/covid-19-coronavirus-emissions-pollution/>

³ See [Traffic is Way Down Because of Lockdown, But Air Pollution? Not So Much](https://www.npr.org/sections/health-shots/2020/05/19/854760999/traffic-is-way-down-due-to-lockdowns-but-air-pollution-not-so-much), NPR Morning Edition (May 19, 2020). Available at <https://www.npr.org/sections/health-shots/2020/05/19/854760999/traffic-is-way-down-due-to-lockdowns-but-air-pollution-not-so-much>

⁴ California Air Resources Board, “California’s ZEV Regulation for 2018 and Subsequent Model Year Vehicles”, CARB Webinar (May 31, 2016),
<https://ww2.arb.ca.gov/resources/documents/zev-regulation-tutorial-model-years-2018>

further clarify the need to satisfy credit deficits even after a penalty is applied to avoid a “pay to play” assumption some stakeholders may have.

Production Plans

The health of Rivian's employees and communities is paramount to the Company. The COVID-19 situation initially led to the closing of all Rivian facilities, moving to a work-from-home model, and postponing work where prudent. Although Rivian was forced to shift start of production of R1T vehicles into calendar year 2021, volume production has not been delayed for R1 vehicles and the heavy-duty trucks. Limited construction at the Normal, Illinois manufacturing facility continues as both safe and prudent. In summary, the COVID-19 delays have not affected expected volume production of the all-electric R1 and the all-electric heavy-duty trucks.

To assure the California Air Resources Board once more, Rivian fully intends to deliver tens of thousands of class 2b and 3 heavy-duty trucks annually. Heavy-duty production is set to begin in calendar year 2021 and ramp up to over ten thousand units per year in calendar year 2022 and beyond.

Conclusion

The California Air Resources Board should adopt the Advanced Clean Truck regulation as proposed without delay. Recent events should only serve to harden the resolve to adopt the ACT proposal without further changes. In addition, Rivian's agreement to produce at least 100,000 all-electric class 2b and 3 heavy-duty trucks by the end 2030 should serve as an indicator of possible heavy-duty ZEV penetration.

Rivian looks forward to working with the California Air Resource Board on implementing the proposed ACT and other directionally similar efforts such as Low Carbon Fuels Standards, the Light-duty ZEV program, and other vehicle programs. Please let us know if you would like to discuss this letter or the Advanced Clean Truck proposal.

Sincerely,

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