October 16th, 2024

Chair Liane Randolph and Board Members California Air Resources Board 1001 I Street Sacramento, CA 95814

RE: Comments of Paul D. Hernandez on the Proposed Low Carbon Fuel Standard (LCFS) Amendments, Second 15-Day Changes to Proposed Regulation Order

Submitted electronically to: https://ww2.arb.ca.gov/applications/public-comments.

Dear Chair Randolph and Members of the Board:

Pursuant to the California Air Resources Board's (CARB's) Second Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information for the Proposed Low Carbon Fuel Standard Amendments, released October 1, 2024 ("Second 15-day Amendments"), I respectfully submit the following comments. My name is Paul Hernandez. For more than 10 years I have worked in the transportation electrification sector with a focus on California's zero-emission vehicle (ZEV) policies, and I am in the early stages of establishing a California-based startup. Given this important juncture for the LCFS program, I wanted to provide comments to CARB in a personal capacity to support Second 15-day Amendments, to specifically support its transportation electrification provisions, and to further share ideas on how CARB can strengthen the LCFS program's alignment with the e-mobility sector.¹

Support for Second 15-Day Changes

I commend CARB staff on their continued initiative to build an updated and robust LCFS program. In addition to the Second 15-day Amendments, I have reviewed the 2024 Rulemaking Documents, as well as the meeting and workshop docket materials dating back to February 22, 2023.² As demonstrated in these documents, and as detailed throughout the robust workshop series, I believe that CARB has indeed incorporated input from a diverse array of stakeholders to arrive at the current and balanced Proposed Regulation Order. As such, I am pleased to

¹ In this case, I use a general definition of e-mobility, or electromobility, which includes the use of electric powertrains and technologies to electrify vehicles and transportation. It includes Vehicles: Cars, buses, trucks, off-road vehicles, ships, and ferries that are fully or partly electric, like hybrids; Powertrains: Full electric vehicles, plug-in hybrids, and hydrogen fuel cell vehicles; Communication technologies: In-vehicle information and communication technologies; and Connected infrastructures: Connected infrastructures to enable electric propulsion

² Website Access: https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-meetings-and-workshops

support CARB's Second 15-day Amendments and more widely the updates that to the LCFS program that are under consideration by the Board.

Support for Transportation Electrification (TE) Provisions

With respect to LCFS updates in support of the TE sector, I am especially appreciative of CARB's continued leadership as demonstrated by the inclusion of multiple TE provisions, including the proposed amendments to include: a) the shared fleet-owned shared HD- Fast Charging Infrastructure (FCI) charging site provisions; b) the DC FCI Pathways for Light- and Medium-Duty Charging Sites, and d) DC FCI Pathways for Heavy-Duty charging sites. The inclusion of these provisions will encourage fleet diversification and continue to promote the deployment of ZEV infrastructure for multiple fleet classes, which deeply aligns with a diverse array of the state's TE policy drivers.

Recommend Modifications to Section 95488.7(a)(3).

There are opportunities to strengthen the LCFS program's alignment with innovations occurring within the e-mobility sector. Here, I encourage CARB to consider providing adjustments to Section 95488.7(a)(3) specifically to allow for stakeholders to file innovative Economic Efficiency Ratios (EERs), even in scenarios where the fuel-vehicle combination is a variation of the EERs that are already included in the Regulation's Table 5.3 At this time, Tier 2 EER pathways are only allowed for fuel-vehicle combinations not already included in the Regulation's Table 5, which I believe may unintentionally deter some entities within the e-mobility sector from exploring EER innovation.

The current regulation states that for:

 "Tier 2 Pathways for EER-Adjusted Carbon Intensity. Applicants supplying fuel for a transportation application that is not included in Table 5 may apply for an EER-adjusted carbon intensity for reporting and credit generation purposes."

To embolden EER innovations, I would recommend the following adjustment (see *underlined*):

 "Tier 2 Pathways for EER-Adjusted Carbon Intensity. Applicants supplying fuel for a transportation application that is not included in (or is a scientifically justifiable variation or combination of EERs from) Table 5 may apply for an EER-adjusted carbon intensity for reporting and credit generation purposes."

Allowing for EER innovation in this manner would embolden the e-mobility sector to utilize the Tier 2 Pathway process to work with CARB to develop innovative solutions that help meet CARB's objectives. Moreover, I envision that the e-mobility sector can indeed demonstrate and prove additional EER value to CARB within the LCFS regulatory regime while fortifying

³ Tier 2 EER pathways are only allowed for fuel-vehicle combinations not already included in the Regulation (see section 95488.7(a)(3) for the rules governing these types of pathways, pages 123-124 of the Regulation text).

proposed methodology consistent with the scientific defensibility that CARB requires.⁴ Moreover, this adjustment would simply allow for entities to be considered eligible to apply for the Tier 2 Pathway review process, where deeper review and methodology critique occurs.

Indeed, there are multiple scenarios related to a vehicle's capacity, efficiency, technology use, vehicle utilization, and other factors that (if more precisely captured within the LCFS program) may result in added benefits (environmental and otherwise) from the program. As such, I would encourage CARB to consider the exploration of EER innovation as part of its final decision within this Rulemaking, and consider making the adjustments as proposed earlier with respect to Table 5.

Conclusion

Thank you for the opportunity to provide these comments.

I am pleased to support the Second 15-day Amendments, and more broadly thank CARB and staff for their 20-month initiative to revise and update the LCFS program. I am especially pleased that the program is taking on multiple provisions which will further help the state achieve its TE infrastructure and ZEV deployment goals, and I look forward to the opportunity to further share my ideas on how to better align the provisions of Section 95488.7(a)(3) with the needs of the innovative e-mobility sector.

Please reach out to me with any questions or for clarification regarding this correspondence.

Respectfully Submitted,

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⁴ **Scientific Defensibility.** For a proposed Tier 2 pathway to be certifiable by the Executive Officer, the fuel pathway applicant must demonstrate that the life cycle analysis prepared in support of the pathway application is scientifically defensible in the Executive Officer's best engineering and scientific judgment.