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January 15, 2024

RE: Comments Regarding the Advanced Clean Cars II Amendments Kick-Off Workshop

Thank you for the opportunity to comment on the Advanced Clean Cars II (ACCII) amendment concepts presented at the November 15, 2023, workshop. The Union of Concerned Scientists (UCS) supports a strong ACCII regulation to protect public health and reduce emissions and many of the proposed revisions to ACCII would help further these goals.

- UCS agrees with CARB that an ACCII GHG standard is needed to protect against volatility in the federal standard. In addition, the ACCII GHG standard should be aligned with the EPA Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium Duty Vehicles if those standards are sufficiently stringent to protect public health and welfare. Specifically, the standards should reflect EPA's Alternative 1 with a steeper increase in stringency after 2030. This alternative standard is feasible and produces greater pollution reductions and societal benefits than EPA's Proposed Standard.¹
- CARB should also implement an anti-backsliding mechanism to ensure that non-ZEV vehicles do not increase in emissions. Absent this mechanism, a fleet average GHG standard will become non-binding as the required ZEV sales fraction in California increases due to the existing ACCII ZEV requirements.² Anti-backsliding measures will ensure that non-ZEV vehicles continue to use available technologies to reduce GHG emissions.
- UCS agrees with CARB that the PHEV fleet utility factor (FUF) should be lower than the current EPA standard to reflect lower observed FUFs in usage compared to both the existing FUF curves currently in use and the proposed FUF in the EPA rule. CARB should rely on actual usage data to the extent possible. Using the current FUF could lead to PHEVs that have a large difference between real-world emissions and the compliance values for GHG emissions. The use of PHEV powertrains in larger vehicles such as SUVs and pickups will cause this gap to grow, due to the gap between the zero grams per mile CD operation and the

¹ Center for Biological Diversity, Conservation Law Foundation, Environmental Law & Policy Center, Natural Resources Defense Council, Public Citizen, Sierra Club, and the Union of Concerned comments in response to the Environmental Protection Agency's Proposed Rule titled Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. Online at: <https://www.regulations.gov/comment/EPA-HQ-OAR-2022-0829-0759>

² CARB Staff Presentation "Advanced Clean Cars II Amendments Kick-Off Workshop", November 15, 2023, slide 20.

high gram per mile operation when the internal combustion engine is running. Over-crediting PHEVs' purported electric driving would create a new and unjustified loophole that would likely slow down the path to greater deployment of zero-emission technologies within the fleet.

The gap between the proposed FUF and the real-world data is highest for vehicles with a CD range between 42 and 62 miles. The ACCII ZEV regulations for model year 2029 and subsequent vehicles require a minimum certification electric range of 70 miles to be eligible for credit values, which is approximately a 50-mile label range. Therefore, PHEVs designed to meet the minimum range for ZEV credit value eligibility are likely to have the largest deviations between real-world emissions and the compliance emissions calculated using the proposed FUF.

- UCS supports conformance testing for EV charging interoperability. The ability to reliably use public DC fast charging facilities is crucial to achieving goals of ACCII and is especially important to BEV drivers without access to home charging.
- UCS supports the development of a new consumer-facing ZEV label. Standardization of fast-charging time metrics would be particularly informative. Customers also would benefit from more information on the impact of temperature on range.

Amendments to ACCII are important to ensure that GHG and criteria pollutants are reduced as quickly as possible to protect public health and the environment. We look forward to working with CARB in this process.

Sincerely,

A handwritten signature in black ink that reads "David Reichmuth". The signature is written in a cursive, flowing style.

David Reichmuth
Senior Engineer
Clean Transportation Program
Union of Concerned Scientists

Oakland, CA