

January 11, 2024

Via Email: cleancars@arb.ca.gov

Via docket: <https://ww2.arb.ca.gov/public-comments/comment-log-advanced-clean-cars-ii-amendments-november-workshop>

Ms. Liane Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Chair Randolph,

Hyundai America Technical Center, Inc. (HATCI) appreciates the opportunity to provide comments on the proposed amendments to the Advanced Clean Cars II (ACC II) regulations discussed during the California Air Resources Board's (CARB) November 15, 2023 workshop (Workshop). HATCI is the U.S.-based research and development (R&D) branch for both Hyundai Motor Company (HMC) and KIA Corporation (Kia), and together with HATCI, are collectively referred to as Hyundai Motor Group (HMG). HATCI is commenting on behalf of both HMC and Kia. Additionally, HATCI supports the comments submitted by the Alliance for Automotive Innovation (AFAI) regarding the ACC II amendments.

As described during the Workshop, HMG agrees with CARB's decision to wait until the U.S. Environmental Protection Agency (EPA) Multi-Pollutant Emission Standards for Model Years 2027 and Later for Light-Duty and Medium-Duty Vehicles final rule (Multi-Pollutant Rule) is issued before deciding on proposed amendments to ACC II's Green House Gas (GHG) and Low-Emission Vehicle IV (LEV IV) criteria standards.

I. GHG standards

HMG continues to make strong investments in our electrified vehicle fleet and is committed to working toward California's climate target for carbon neutrality by 2045. HMG understands CARB's desire to establish a California GHG program and ensure continued movement towards California's climate goals.

CARB noted its concern in the Workshop that the federal GHG standards alone do not prevent backsliding and requested input on anti-backsliding mechanisms. HMG is committed to moving forward with zero emission vehicles which will soon remove all risk of GHG backsliding. HMG does not believe potential backsliding mechanisms are necessary in the ACC II regulations given HMG's strong commitments to electrification, including its goal for every HMG vehicle to be fully electrified by 2040 and some brands being fully electric by 2030.

Additionally, HMG does not support the direct adoption of EPA's GHG standards for the ACC II regulations. The stringency of the EPA standards are based on the inclusion of ZEVs. It would be very difficult to meet the same standards with ICE only emission performance.

HMG continues to support the restoration of the deemed-to-comply option. This option would significantly reduce the reporting burden experienced by manufacturers with two separate GHG standards.

HMG agrees with CARB that leakage credits should continue to be included in the ACC II regulations. HMG believes the credits will continue to be an essential incentive for the automotive industry to ensure anti-leakage designs in vehicles. HMG is an early adopter and already fully compliant with the refrigerant rule in the American Innovation and Manufacturing Act. HMG appreciates the direct leakage credits to reward early compliance but does not support additional regulations for low leak A/C systems. In addition to fully transitioning to HFO-1234yf in model year 2021, HMG also applied a seal washer to our system to further prevent leakage. HMG made these large investments with the expectation that earned credits would offset some of these costs in the future. HMG recommends that CARB does not align with EPA on the immediate elimination of leakage credits, but instead proposes a gradual phase-down which will continue to encourage manufacturers to use low-leak systems.

HMG also supports the continuation of A/C efficiency credits and off-cycle credits for BEVs, as those credits encourage the development of GHG reducing technologies and provide real world benefits.

II. Criteria Standards/ LEV IV

HMG appreciates CARB waiting for the evaluation of the Multi-Pollutant Rule to consider changes to the criteria pollutant standards. HMG looks forward to further discussion on where alignment is appropriate after reviewing the final Multi-Pollutant Rule once issued.

For consistency and reducing test burden, HMG believes it is appropriate for CARB to align certification bins with the EPA.

HMG is opposed to aligning with EPA's proposed particulate matter (PM) standard of 0.5 mg/mi in the Multi-Pollutant Rule. HMG has expressed concern with the EPA related to measurement inaccuracy in testing at this extremely low level of PM. HMG's R&D is preparing for CARB's current PM target of 1.0 mg/mi and urges CARB to maintain the current PM standard in the ACC II regulation. CARB's current target of 1.0 mg/mi is already difficult and will require significant design changes, which include adding a gasoline particulate filter (GPF) for several models. At this time, HMG does not believe a 0.5 mg/ mi standard to be reasonable or technically feasible.

III. North American Charging Standard (NACS)

HMG, with many other automakers, are quickly moving towards the North American Charging Standard (NACS) (SAE J3400, expected to be finalized around the middle of 2024). HMG strongly urges CARB to include NACS as an option to meet compliance with ACC II's charging requirements. HMG also requests that CARB eliminate the requirement for the Combined Charging System (CCS) adapter from the ACC II regulations for model year 2026. This is a time sensitive issue, as product planning is already underway for how to source and package these adapters. A final decision in summer 2025 based on CARB's current timeline for the ACCII amendments would be too late for vehicles already certified for model year 2026.

IV. ZEV Assurance Measures - Environmental Performance (EP) Label

HMG recognizes CARB's desire to include more detailed and valuable information for potential EV consumers on the EP label. HMG strives for consumers to have clear information when making a decision to purchase an electric vehicle but urges CARB to consider the excessive burden to the manufacturer compared to the value the information brings to the consumer. HMG urges CARB to coordinate with federal agencies and align with the EPA/DOT fuel economy label. This would avoid duplicative, conflicting, and confusing labels for consumers.

If alignment is not possible, HMG suggests that CARB create metrics that can be derived from an equation for the new label rather than submitting the data from actual testing. Another option for consideration is to modify current test procedures to generate additional data rather than adding new tests. Both options could support additional label information while avoiding increased test burden.

V. Conclusion

HMG thanks CARB for the opportunity to comment and looks forward to engagement with CARB on the proposed amendments to the ACC II regulation.

Sincerely,



Richard Willard

Director, Certification and Regulation

Hyundai America Technical Center, Inc.