BMW Group

January 12, 2024

Submitted via electronic mail to California Air Resources Board (cleancars@arb.ca.gov).

Subject: Comments on proposed amendments to the CARB Advanced Clean Cars II program

BMW of North America, LLC ("BMW NA") appreciates the opportunity to participate in the development of amendments to the Advanced Clean Cars II (ACC II) regulations. BMW NA supports the comments filed by the Alliance of Auto Innovators regarding the general objective. Incorporating and aligning the California regulations with the federal requirements from the U.S. Environmental Protection Agency's (EPA's) Multi Pollutant Emissions Standards is critical to a successful and cost-effective program that benefits the environment and California consumers. Beyond alignment with EPA's ongoing rulemaking, CARB has identified several areas to either expand or clarify the existing ACC II regulations.

This letter is divided into several sections addressing the respective topics.

BMW Group's perspective on the proposed Amendments to the Advanced Clean Cars II Program

Harmonization of ACC II with EPA's upcoming Tier 4 Regulation

BMW NA appreciates the consideration of CARB to harmonize the ACC II rulemaking with the upcoming Federal Tier 4 Multipollutant Rulemaking. BMW NA would like to encourage CARB to continue to work closely together with EPA, to enable manufacturers to abide by both sets of regulations with one single fleet. Our main concern is that a diverging approach in the United States between Federal regulations and California's regulations will substantially increase the hurdles to fulfill fleet and vehicle standards.

The main focus from a BMW NA perspective should be a harmonized requirement set to avoid diverging technology and testing efforts for either regulation.

BMW would like to encourage CARB to consider the following harmonization efforts specifically.

Harmonization of NMOG+NOx Certification Bins and PM standards

Historically, the California and Federal rulemakings were aligned regarding the emission certification Bins (including PM standards). Unfortunately, the current EPA Tier 4 Multipollutant proposal and ACC II rulemaking are not aligned in that regard. California's Emission Bins SULEV25 and SULEV15 are not included in the federal proposal, whereas the proposed federal Bin10 is not included in the ACCII rule. BMW NA is concerned, that this misalignment would cause various challenges for the automotive industry related to the general certification processes. Therefore, BMW NA appreciates the consideration of CARB to harmonize the Bin structure with the federal rulemaking and would like to encourage CARB to continue these efforts.



Harmonization of Battery Durability metrics (SOH vs. SOCE)

BMW NA supports the intent of both agencies to introduce durability and warranty requirements for BEV, specifically related to the high-voltage battery as being the critical EV component. The current Tier 4 NPRM proposes a different metric to evaluate these requirements (SOCE) compared to the ACC II regulation (SOH). To fulfill both requirements, it would be necessary to implement both metrics simultaneously and duplicate the display for the customer, as well as the warranty provisions depending only on the place of registration in the U.S. BMW NA is very concerned that this would ultimately lead to major disruptions in terms of the agencies and industry's mutual efforts to grow the acceptance of US customers for adoption of the EV technology and present additional hurdles toward electrification. Therefore, BMW NA would like to strongly encourage CARB to work closely with EPA on a harmonized requirement set for this specific topic.

Amendments to California GHG regulation and flexibilities

BMW NA continues to support the Agency's objective to reduce carbon emissions. From a historical perspective, BMW NA's commitment to the reduction of GHG has been shown by its voluntary cooperation with CARB in 2019, in which we committed to California GHG standards far more stringent than those of the Federal SAFE Vehicles rule.

BMW NA supports the position of the Alliance of Automotive Innovators regarding the general concerns about addressing extended GHG fleet requirements incorporated in amendments to the ACC II rulemaking. Differing to the federal GHG requirements, the existing ZEV mandate in California forces a transition to a 0 g/mi fleet average by 2035. Additional GHG requirements could be viewed as duplicative regulations aiming for the same goal.

BMW is also concerned about CARBs proposal for ICE specific GHG requirements. Separately mandating ICE specific GHG requirements while the overall fleet standards continue to be reduced would add regulatory complexity as well as distract from the transition to EVs without commensurate climate benefits.

As stated in BMW NA's public comments to the Federal Tier 4 proposal, BMW opposes EPA's proposal to phase out the OCT credit cap for the full fleet based on the assumption that a changing fleet mix from ICE to BEV removes the benefit of an OCT credit provision. The menu credit technologies and already approved alternative pathway technologies still provide a real-world CO2 benefit on ICE vehicles and phase-out of the OCT credit cap could lead manufacturers to reconsider implementation of certain CO2-reducing technologies. As an alternative, BMW proposes that rather than phase-out the OCT cap, CARB should maintain a certain cap which applies only to the ICE vehicle portion of the fleet (including PHEV). Manufacturers would continue to receive credit for innovative CO2 reducing technologies listed in the menu and for alternative and 5-cycle pathway technologies which are approved prior to 2027MY for those ICE vehicles. This would still allow manufacturers to receive credits for technologies with a real-world CO2 benefit. Based on the anticipated electric vehicle percentages in EPA's standard proposal, the effective whole-fleet OCT g/mi cap would still reduce significantly compared to the current cap (for example, a 50% BEV fleet would create an effective OCT cap of 5 g/mi), in line with the agencies intent to change the approach to accommodate a changing fleet mix.

Regarding the reconsiderations of the PHEV fleet utility factors, BMW NA would like to encourage CARB to focus on an aligned approach with the federal rulemaking.



Proposed ZEV assurance measures

BMW NA appreciates the intent of CARB to ensure successful vehicle-to-charger communication in real world operation but would like to ensure that both the vehicle and the charger are subjected to any testing requirements. BMW NA believes it is important that any conformance testing requirements should not target only vehicle manufacturers, but also the infrastructure manufacturers. Both need to be compliant in order to ensure that customers experience first-time plug-in success when charging. Additionally, such conformance testing requirements are already being worked on in other working groups being led by the ChargeX Consortium from the Joint Office, as well as in CharlN and have official ISO and DIN standards written to ensure that such tests are correctly defined and implemented. BMW NA would like to encourage CARB to consider the developments in these working groups for the amendments to the ACC II program.

Environmental Performance Label (EPL)

BMW NA supports the general customer communication concept of transparent, accurate and comparable key performance metrics of BEVs.

However, BMW NA does have major concerns regarding an additional performance label to the already existing Monroney Label. The communication of differing performance metrics to the customer would harm the mutual efforts in growing the acceptance of the EV technology. Furthermore, BMW NA is concerned that differing performance metrics used for customer communication could create legal problems regarding federal marketing provisions of the Federal Trade Commission (FTC) defined in 16 CFR Part 259. Additionally, BMW NA is concerned about additional testing requirements to the already existing testing burden for BEV.

BMW NA believes, that the currently used 5-cycle adjustment provisions for the federal Monroney Label figures represents an accurate real-world adjustment.

BMW NA supports CARB efforts to improve the charge time information for BEV. BMW NA believes that the current BEV certification test procedures should include defined charging procedures (voltage/current/level) to make charge time information more comparable between different models and manufacturers.

BMW NA appreciates the opportunity to comment on the proposed Amendments to the Advanced Clean Cars II Program and thank you for your consideration. We look forward to working with CARB staff and other stakeholders on the implementation of these amendments.

Sincerely,

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BMW of North America, LLC



BMW Group in America

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