

March 20, 2017

The Honorable Mary Nichols Chair, California Air Resources Board 1001 | Street Sacramento, CA 95814

RE: ACC Midterm 2017 Advanced Clean Car Rule- Greenhouse Gas Standards (*Comment submitted electronically via online portal)

Dear Chair Nichols,

We appreciate the opportunity to provide comments regarding California's Advanced Clean Cars Midterm Review (Midterm Review). This comment relates to the greenhouse gas reduction programs (GHG Programs) discussed in the Midterm Review. Due to recent federal regulatory action, we recommend that the Governing Board direct ARB staff to revisit some of the Midterm Review's conclusions. In particular, we recommend that staff be directed to assess whether California could better achieve GHG reductions in the transportation sector through the integration of mid and high blend ethanol strategies as components of the Advanced Clean Cars Program (ACC Program).

Staff Review of GHG Programs

ARB staff participated in the joint agency midterm evaluation of federal passenger vehicle GHG standards and corporate average fuel economy (CAFE) standards with the U.S. Environmental Protection Agency (EPA) and the National Highway and Transportation Safety Association (NHTSA). The Midterm Review reflects the staff recommendations that the ACC Program be maintained in its present form, and that California continue to participate in the national program through the deemed to comply provision. However the report states,

"These findings on the benefits to California are based on an analysis assuming the existing national GHG standards. If the stringency of the national GHG standards were substantially changed, (...) these findings would likely be different. In that event, California could revisit whether it would have to conduct a new analysis to determine whether compliance with a new National Program would be an appropriate approach under California's LEV III program to address California's unique air quality challenges and its mandates to achieve aggressive GHG reductions to protect public health and the environment."

Recent Federal Policy Developments

On March 13th, EPA and NHTSA issued a Notice of Intention to Reconsider the Final Determination of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light Duty Vehicles. While it was appropriate for the Midterm Review not to forecast this development, EPA and NHTSA have now formally announced the reopening of these federal GHG policies. It is therefore prudent for ARB to recognize the existence of a dynamic federal regulatory landscape, and to revisit California's strategies accordingly. The Midterm Review provides the Governing Board and ARB with an immediate opportunity to begin designing California's GHG programs to be more self-reliant, and to continue ensuring that these policies are informed by federal GHG policies.

Ethanol is a Proven Method to Reduce GHG's

Low blend ethanol has supplied most of the GHG gases achieved by California's Low Carbon Fuel Standard (LCFS) to date. Low blend ethanol has also generated most of the renewable identification numbers (RINs) under the federal Renewable Fuel Standard (RFS). There are substantial additional GHG reductions that mid and high-level ethanol can deliver to the state.

Flex fuel vehicles ("FFV's") are capable of utilizing high blend ethanol, with the typical fuel blend in California being 85% ethanol with 15% gasoline ("E85"). Previously, FFV's were a consistent component of both the CAFE and federal passenger vehicle GHG standards. FFV's received credit for improving fuel economy and reducing GHG emissions based on the calculations of vehicle mileage performance with E85. However, the level of actual E85 fuel usage in FFV's previously caused NHTSA and EPA to phase down the credit value of FFV's within the CAFE and GHG Standards. This lack of federal credit caused the automakers to reduce the number of available FFV models. In 2013, there were 157 models of FFV's. In 2017, that number has declined to 52. Paradoxically, the decline in federal policy support for FFV's corresponded with a strong increase in demand for E85, and a new pressing policy need for both FFV's and E85 stations to facilitate the introduction of mid level ethanol blends (MLEB's) for next generation vehicles that require high octane fuel.

This policy imperative is well expressed in a very recent "Summary of High-Octane Mid-Level Ethanol Blends" authored by the National Renewable Energy Laboratory and Argonne National Laboratory:

"Original equipment manufacturers (OEMs) of light-duty vehicles are pursuing a broad portfolio of technologies to reduce CO2 emissions and improve fuel economy. Central to this effort is higher efficiency spark ignition (SI) engines, including technologies reliant on higher compression ratios and fuels with improved anti-knock properties, such as gasoline with significantly increased octane numbers. Ethanol has an inherently high octane number and would be an ideal octane booster for lower-octane petroleum blendstocks. (...) Thus the legacy FFV fleet can serve as a bridge by providing a market for the new fuel immediately, so that future vehicles will have improved efficiency as the new fuel becomes widespread. In this way, (High Octane Fuel) can simultaneously help improve fuel economy while expanding the ethanol market in the United States via a growing market for an ethanol blend higher than E10."

Conclusion

We look forward to engagement with ARB to further evaluate how mid and high level ethanol blends can best be integrated into the program to yield the highest possible dividends in terms of GHG reduction, other air quality benefits, petroleum reduction, benefits to disadvantaged communities, and the expansion of California's clean economy.

Thank you for your consideration of this comment.

Sincerely

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