

BMW Group

July 5, 2018

Sam Wade
Branch Chief
Transportation Fuels Branch, Industrial Strategies Division
Air Resources Board
1011 I Street, Sacramento, CA 95814

Subject: BMW North America, LLC comments on proposed 15-day modifications to the Low Carbon Fuel Standard (LCFS) regulations

Dear Mr. Wade,

BMW of North America, LLC (BMW) appreciates the opportunity to comment on the incremental LCFS credit program rules included in the proposed 15-day modifications released by the California Air Resources Board (CARB) on June 20, 2018. The Auto Alliance represents BMW's views on all other LCFS issues. These other LCFS issues will be addressed in separate comments submitted by the Auto Alliance.

In general, BMW supports CARB's incremental LCFS credit program. The concept of providing additional LCFS credits for the use of renewable energy in charging electric vehicles should be added to the LCFS program and can provide an incentive for drivers, OEMs, utilities and facilities to reduce emissions associated with electric vehicle charging. These comments provide recommendations on how the proposed incremental LCFS rules can be modified to better reach this goal.

We believe that the most effective way to deliver incremental LCFS credits from electric vehicle smarting charging is to increase the amount of charging that occurs during the daytime hours when solar is highest on the grid. BMW is exploring this as a use case in a smart charging pilot using drivers in the San Francisco Bay Area and working with PG&E to provide incentives and communication strategies to increase charging during daytime hours. To ultimately be effective at increasing charging during the day, BMW and PG&E provide incentives to customers to shift their charging from nighttime to daytime hours. As this requires new messaging and new forms of customer incentives, CARB should allow parties to experiment with programs that can increase daytime charging. CARB should modify the proposed rules to allow LSEs the flexibility to create programs that incentivize daytime charging and allow utilities to capture the incremental LCFS credits from these programs. These programs should allow OEMs and charging stations to contribute to daytime charging on a voluntary basis. Several specific changes can help make this happen:

- The bifurcation between residential and non-residential charging makes it difficult for the home charging entity to coordinate with the non-residential charging entity to encourage daytime charging. The home charging Fuel Serving Entity (FSE) has no incentive to support increases in daytime charging if the benefit goes entirely to the non-residential FSE. As the most common scenario for increasing daytime charging involves a workplace site (non-

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residential) and a home site (residential), the bifurcation between sites may be a major obstacle to enabling access to incremental LCFS credits for smart charging.

- The requirement for automakers to provide the VIN should be eliminated to avoid unnecessary reporting of personally-identifiable information. The purpose of collecting this data from OEMs is to eliminate the potential for double counting between data submitted by OEMs and that of LSEs. We recommend that CARB staff consult with stakeholders to consider alternative solutions to address double counting.
- The existing counting rules for residential charging seem to provide a relatively smaller incentive for residential daytime charging relative to a non-residential site providing daytime charging. The rules appear to require a home site to report all its charging events, including nighttime charging, in order to calculate how many incremental LCFS credits it gets from smart charging. This means its daytime charging will be averaged out against its nighttime charging. A non-residential charging site, particularly a workplace site, will likely have less nighttime charging. This means that its daytime charging will be averaged against lower amounts of relatively high carbon-intensity (CI) charging, resulting in a higher incentive to participate in smart charging. Given the high nighttime CI rates and the assumed requirement to report all charging events, it is not clear that a residential charging FSE would have an incentive to participate in the incremental LCFS program using the smart charging methodology. Clarifying that smart charging CI does not average out against high nighttime CI hours would create more value for participating households, resulting in more emissions reductions attributed to the incremental LCFS program. This can be accomplished by modifying the rules to allow FSEs to report any charging hours they wish to count toward the incremental credits and not require all charging hours.
- The hierarchy for generating single family residential incremental LCFS credits may limit participation from OEMs because it does not provide a clear, upfront indication as to whether a household is already being counted by the LSE through one of its programs. Absent a simple, clear way to determine which households are counted by LSEs, OEMs will not have a strong incentive to enroll customers in a smart charging program. We recommend that CARB staff consult with stakeholders to consider ways to modify the LSEs eligibility as the first order in the hierarchy to enable greater participation from OEMs and simpler processes for identifying households that might participate.
- The regulation provides an hourly emissions factor to measure the benefit of smart charging. CARB should allow LSEs to provide an alternative hourly emission factor if such a factor is based on the time-variant energy delivered by the LSE.
- Section 95491 seems to mean that two applications for receiving smart charging credits for the same vehicle would result in neither entity receiving credits. According to section 95491(d)(3)(B)(2)(c) (page 92): "Only a single entity can generate incremental credits for smart charging for the same FSE. If two or more entities report for the same FSE to generate incremental credits, no incremental credits will be issued for that FSE." As a vehicle or a charging station can be an FSE, there may be cases where both the charging station and the vehicle claim incremental LCFS credits for smart charging. In this case, the hierarchy described in Section 95483(c)(1)(B) should be used to determine the allocation of credits. We do not interpret the language on page 92 to supersede the allocation hierarchy for incremental LCFS credits in Section 95483(c)(1)(B).



We interpret the 15-day modifications to allow LSEs to use telematics data as a data source to measure single family incremental LCFS credits assigned to the LSE. We believe this provides an opportunity for LSEs to explore partnerships with OEMs to generate credits for their customers, should an OEM voluntarily partner with an LSE. Additional clarifications are needed to determine the impacts of LSEs using multiple data sources to measure single family incremental LCFS credits.

We welcome the opportunity to discuss these comments with CARB staff as they continue to develop the LCFS program.

Sincerely,



Adam Langton

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Energy Services Manager

