



Catherine Reheis-Boyd  
President

August 30, 2018

Clerk of the Board  
California Air Resources Board  
1001 I Street  
Sacramento, California 95814

sent to: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Re: WSPA Comments on the CARB Proposed 2<sup>nd</sup> 15-day Modifications to the Low Carbon Fuel Standard Regulation Amendments

Dear Clerk of the Board,

The Western States Petroleum Association (WSPA) appreciates this opportunity to provide comments to the California Air Resources Board (CARB) regarding the Proposed 2<sup>nd</sup> 15-day Modifications to the Low Carbon Fuel Standard (LCFS) Regulation Amendments. WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and four other western states.

On April 23, 2018 and July 5, 2018, WSPA provided feedback on the Proposed LCFS Regulation Amendments and the Proposed 1<sup>st</sup> 15-day Modification to the LCFS Regulation Amendments, respectively. The comments provided below augment that prior feedback. In addition, we will be providing additional comments regarding the Carbon Capture and Sequestration Protocol in a separate comment letter.

## Second Notice of Public Availability

In the Second Notice of Public Availability of Modified Text, Section N (page 19), the following statement is made regarding § 95488.8(i)(1) and § 95488.8(i)(2):

### **N. Modifications to Section 95488.8. Fuel Pathway Application Requirements Applying to All Classifications.**

1. In section 95488.8(i)(1) and (2), staff proposes to clarify that book-and-claim accounting may be used for electricity and biomethane supplied to produce hydrogen that is used as a transportation fuel, as well as hydrogen used in the production of a transportation fuel—including both hydrogen used in petroleum refineries, which can be claimed under the Renewable Hydrogen Refinery Credit provision, and hydrogen used e.g., in hydrotreatment for renewable diesel production.

WSPA requests that CARB verify that such processes as hydrocracking and renewable gasoline would be included in the list along with renewable diesel production. As CARB's explanation above is intended as an example and not an exhaustive list, perhaps adding "e.g., **but not limited to** hydrotreatment for renewable diesel production" or add "and hydrocracking for gasoline".

## **§ 95481(a) - Definitions and Acronyms**

In § 95481(a)(19), the proposed language should refer to “renewable hydrocarbon diesel” rather than “renewable diesel” to be consistent with the definition in § 95481(a)(123).

## **§ 95486.2 - Generating and Calculating Credits for ZEV Fueling Infrastructure Pathways**

WSPA continues to believe that infrastructure credits for hydrogen fueling stations and EV charging stations do not conform to the spirit of the LCFS program. Notwithstanding this position, WSPA does have questions and suggestions regarding the proposed program.

Proposed § 95486.2(a) and § 95486.2(b) contain regulatory language for hydrogen refueling infrastructure (HRI) credits and DC fast charging infrastructure (FCI) credits, respectively. At the August 8, 2018 CARB workshop, CARB staff indicated that the value of both HRI and FCI credits would be limited such that the sum of grant funding and the HRI/FCI credit value could not exceed the total installation cost of the station. However, only § 95486.2(b) related to FCI credits contains the relevant regulatory language in § 95486.2(b)(4)(H). WSPA requests that CARB clarify the apparent disparity between the proposed regulatory language and the workshop presentation.

§ 95486.2(a)(2)(J) requires that an HRI application include arguments justifying the construction of the station based on elements such as contributing to “robust growth of the statewide hydrogen fueling network.” This is not part of the HRI Pathway Eligibility criteria listed in § 95486.2(a)(1) and suggests that staff may apply additional subjective criteria in approving or rejecting applications. WSPA requests that these application requirements either be removed or made an objective and measurable part of the eligibility criteria.

In § 95486.2(a)(3)(A), WSPA requests that CARB clarify the difference between Hydrogen Refueling Infrastructure (HRI) credits generated by operational stations in the prior quarter and the total HRI capacity of stations that were operational in the prior quarter as it impacts the estimated potential HRI credits from all approved HRI stations.

In § 95486.2(b)(3)(A), WSPA requests that CARB clarify the difference between DC Fast Charging Infrastructure (FCI) credits generated by operational Fuel Supply Equipment (FSE) in the prior quarter and the total FCI capacity of FSEs that were operational in the prior quarter as it impacts the estimated potential FCI credits from all approved FSEs.

In § 95486.2(b)(4)(H), WSPA requests that CARB provide the rationale for choosing the 10% discount rate in the equation to calculate the estimated cumulative value for credits generated in this provision.

## **§ 95488.5 - Lookup Table Fuel Pathway Application Requirements & Certification Process**

In § 95488.5(f), Table 7-2 does not differentiate between weekdays and weekends/holidays. As electricity demand varies between weekdays and weekends, CARB may consider incorporating two smart charging CI tables: one with CI values for weekdays and one for CI values for weekends and holidays.

### **§ 95489(c) - Credits for Producing and Transporting Crudes using Innovative Methods**

In new § 95489(c)(1)(A)(5), CARB has elected to not permit book and claim for Renewable Natural Gas (RNG) usage for transportation facilities which have been added under this section. Book and claim is an essential tool for matching RNG supply with demand because the projects are frequently located in different geographical areas.

Similarly, the proposed regulatory language requires solar electricity be supplied directly to transport facilities (and oil and gas fields) and not through indirect accounting. This language is too limiting as implementation requirements for solar often do not coincide with oil production.

For each of these direct-supply situations, WSPA encourages CARB to at least incorporate a distance limit requirement such as broadening it to include only RNG or solar electricity produced in California. WSPA views the requirement for direct physical supply of RNG and solar energy to crude transport and oil production facilities as a missed opportunity to provide an appropriate incentive to develop this area of the program. WSPA encourages CARB to re-evaluate their position and allow book and claim for RNG and solar energy under § 95489.

As revised, § 95489(c)(1)(A)(5) has removed the following energy sources from the innovative crude provisions: geothermal, ocean wave, ocean thermal, or tidal current energy generation. WSPA strongly encourages CARB to reinsert these carbon free energy sources as they would demonstrate CARB's commitment to an all-of-the-above energy portfolio without prejudice as to the source or destination of carbon free energy.

### **§95489(e)(1)(G) - Refinery Investment Credit Program**

WSPA continues to look forward to the potential of the Refinery Investment Credit Program (RICP) as revised in 94589(e), and appreciates the removal of the word "Pilot" from its name. There is one element, however, that needs to be clarified. The program as outlined in 95489(e) contemplates the need for application for credits well in advance of the project being implemented. Indeed, language proposed in 95489(e)(3)(A)3 specifically references a "preliminary estimate of the refinery investment credit" (emphasis added). This early understanding of credit generation potential for a project is important, and given CARB's desire that this program would incent projects to reduce GHG emissions and carbon intensity of fuels that would not otherwise be justified, it is logical that applicants would need this understanding to progress their investment decisions.

Even after a final investment decision is taken with the benefit of this understanding, there will be significant gap of time from approval to implementation of the project and its actual generation of credits. For large projects, this could be many years and dependent on the timing for receipt of final permits, procurement and installation of equipment and the time to successfully start-up the unit and prove its benefits. Given the need for investment certainty, WSPA recommends amending language in the current 15-day edits as follows in section 94589(e)(1)(G)3:

*"3. Crediting is limited to 15 years from the quarter in which ~~the Executive Officer approves the project's application~~first qualified verification statement for the project is received, as per the requirements of 94589(e)(3)(A)."*

### **§95489(f)(2)(A) - Renewable Hydrogen Refinery Credit Program**

§ 95489(f)(2)(A) contains the calculation methodology for determining credits from renewable hydrogen produced from renewable natural gas (RNG). While staff has proposed a change referencing the CI of fossil natural gas (NG) and RNG from “refinery gate” to “well-to-hydrogen,” this does not make it clear that the biogenic carbon released from the RNG-to-hydrogen production process should be credited to the renewable hydrogen. To eliminate uncertainty in the regulatory language, WSPA recommends amending the language to specifically reference the biogenic carbon credit associated with RNG-to-hydrogen production. Alternatively, the credit value could be added to the credit calculation formula.

### **§ 95491 - Fuel Transactions and Compliance Reporting**

Although CARB requests in § 95491 (d)(3)(A) that the EV credit generators educate the public and consumers on the benefits of EV transportation, all social and environment issues associated with battery manufacturing, including mining for lithium and cobalt, and disposal of used batteries should be disclosed to the public as well.

### **Attachment C - Modifications to the CA-GREET 3.0 Technical Support Documentation**

Review of the August 13, 2018 release of the CA-GREET 3.0 Technical Support Documentation indicates that a number of uncertainties and potential errors exist in the document as written. On August 28, 2018, CARB posted an Errata where CARB staff corrected errors in the CA-GREET3.0 model and five of the simplified calculators. Because of the late release of Errata, WSPA has yet to review the revised CA-GREET 3.0 Technical Support Documentation. Therefore, WSPA will be contacting CARB staff in the near future to discuss areas of concerns and possible remaining clarifications/corrections.

WSPA looks forward to CARB’s responses to our comments. If you have any questions, please contact me at this office, or Tom Umenhofer of my staff at (805) 701-9142 or via email at [tom@wspa.org](mailto:tom@wspa.org).

Sincerely,



cc: Tom Umenhofer - WSPA