

April 20th, 2018

Sam Wade Low Carbon Fuel Standard California Air Resources Board State of California

RE: LCFS18 – Proposed Amendments to the Low Carbon Fuel Standard Regulation

3 Phases Renewables Inc. is providing comments within this letter regarding the 2018 proposed amendments to the Low Carbon Fuel (LCFS) Program.

Non-metered/Non-Residential Charging

To encourage greater installation of EV charging equipment, CARB should consider allowing non-metered/non-residential charging facilities to "opt in" as credit generating facilities. A non-metered/non-residential charging station contributes to lowering carbon emissions associated with transportation fuels in the State of California and therefore should be allowed to participate in the program.

Furthermore, in some situations, non-metered charging facilities may be the only affordable option, even for certain non-residential locations. As a matter of policy, CARB should take into consideration the disincentivizing effect of not allowing these locations to take advantage of LCFS credits. Although the calculation of charger consumption in these cases may be less precise than their metered counterparts, the marketplace has existed long enough to make reasonable estimates upon which reporting may be based.

For reporting purposes, non-metered, non-residential charging consumption can be calculated using registered, metered, non-residential data from the previous year to establish a baseline and an "unmetered" discount factor may be applied. See the equation below for more details:

$$QC_{NM} = UDF * QC_{M}$$

 $QC_{NM} = Nonmetered Charging (MWh/charging port)$ UDF = Unmetered Discount Factor (%) $QC_{M} = Metered Charging Baseline (MWh/charging port)$

Renewable or Low-CI Process Energy Balancing:

Due to the seasonal variability of production of certain renewable resources (solar in particular), to calculate a CI score, 3 Phases believes an annual reporting calculation will be more consistent with GHG reporting than a monthly one, as described in Section 95488.8(h)(1)(C). Additionally, 3 Phases makes the same argument when Indirect Accounting is used for claims; 3 Phases believes that an annual reporting calculation should be used instead of the two-quarter limitation described in 954888.8(i)(1)(A). Given that

the carbon intensity score for the grid is calculated, by CARB, on an annual basis it is appropriate that the timeline for credit balancing be on an annual basis to account for seasonal production variances.

Low Carbon Electricity Supply:

The language in Section 95488.8(i)(B) is somewhat ambiguous regarding which programs need to meet subsections 1-3. 3 Phases suggests that CARB remove ambiguity to ensure a green tariff program must also meet the requirements expected of "other contractual low carbon electricity supply relationship(s)".

Substantiating Proof of Renewable Electricity Sourced:

3 Phases agrees with the language in Section 95488.8(i)(1)(B)(3) regarding the requirement for renewable electricity certificate (REC) retirement. The REC retirement process could be done specifically for the LCFS program using the Western Renewable Energy Generation Information System (WREGIS). The California Renewable Portfolio Standard (RPS) currently requires proof of WREGIS Certificate retirement, so using WREGIS to quantify renewable generation claims for the LCFS program would maintain consistency with the RPS program. Further, 3 Phases believes that WREGIS Certificate retirement should be sufficient to substantiate the quantity of renewable electricity produced from specific renewable assets and that generation invoices should not be required, as described in 95488.8(i)(1)(B)(1), because WREGIS already has strict metering requirements to prove that WREGIS Certificate quantities match renewable generation.

Renewable Energy Credit (REC) Retirement:

As mentioned above, 3 Phases agrees with the language in Section 95488.8(i)(1)(B)(3) regarding the requirement for REC retirement. However, 3 Phases believes clarification is needed regarding how many RECs need to be retired to achieve a zero CI score. Since the California Renewables Portfolio Standard (RPS) requires that the grid is already supplied with renewable electricity, REC retirements for the LCFS program should only be required in addition to the RPS percentage of the electricity mix. For example, if charging load over a period is 1,000 MWh and the RPS requirement for the grid is 29% renewable during that same period, the entity claiming the LCFS credits should be required to retire 710 RECs, NOT 1,000. The additional 290 RECs in that example must be separately retired by the load serving entity to meet the RPS. Requiring a retirement of 1,000 RECs specifically for the LCFS program would ignore the inherent benefits of an already-partially green electricity mix in California.

Renewable Generators

Since all renewable generation results in avoidance of carbon emissions, all renewable generator types that qualify as an Eligible Renewable Resource (ERR), as such term is defined in PUC Code Section 399.12 or 399.16 (not just solar and wind) should be eligible to qualify for lower carbon intensity fuel pathway values. 3 Phases believes including such generation will provide not only an added incentive for bringing all types of renewable projects online (including much needed baseload renewable generation), but also provide a more accurate CI score and create consistency with well-established California regulations. CARB is already quantifying the CI benefits from all types of renewable generation when it calculates the baseline carbon intensity. To facilitate consistent calculation of CI scores, CARB should provide lookup values for any renewable generation type that qualifies as an ERR.

We appreciate this opportunity to comment on the proposed language. Please do not hesitate to contact me with any further questions.

Sincerely,

Michael Leone

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