Agricultural Energy Consumers Association

Comments of AECA
Proposed Amendments to LCFS Regulation

The Agricultural Energy Consumers Association (AECA) appreciates the opportunity to comment on the California Air Resources Board's (CARB) Proposed Amendments to the Low Carbon Fuel Standard (LCFS) Regulation. AECA represents the collective energy interests of the state's leading agricultural associations, including farmers and dairy producers in California. AECA also represents the state's leading dairy digester developers. Both the dairy producers and project developers have a vested interest in the long-term stability and sustainability of the LCFS program in California. The LCFS Program is critical to successful implementation of CARB's Short-lived Climate Pollutant (SLCP) Strategy and the desired reduction in dairy methane emissions. Without a viable long-term LCFS market, dairy methane reduction efforts will fall far short of the state's goals.

AECA generally supports the proposed extension of the LCFS program and believes that a 20 percent target by 2030 is appropriate. AECA is particularly interested in proposed LCFS reforms that will lead to greater opportunities for biomethane fuels, which currently account for just 7 percent of LCFS credits. A robust LCFS that encourages biomethane as an alternative carbon-negative transportation fuel is critical to the successful implementation of the state's SLCP strategy generally and its dairy methane emission reduction targets specifically. Moreover, according to CARB, renewable natural gas accounted for just 68 percent of all fuel used in natural gas vehicles, however, most of this RNG was from sources outside of California. Going forward, CARB must do a better job of ensuring California produced biomethane achieves significant market penetration by taking the steps necessary to encourage its development and use. Reducing SLCPs at the levels targeted by CARB will necessitate in-state production from feedstocks including diverted organic waste and livestock manure. Out-of-state projects provide little, if any, direct SLCP reductions to meet the state's requirements. As a result, the LCFS program is currently providing a subsidy or windfall to out-of-state RNG production at significant cost for California consumers. This out-of-state RNG is also flooding the market to the exclusion of RNG produced here.

AECA offers the following specific comments:

1. Carbon intensity reduction schedule

The proposed regulation changes the current LCFS 10 percent reduction in carbon intensity by 2020 to 7.25 percent. This change will shrink the short-term market (3-4 years) and lead to reduced value for credits. This could have a detrimental effect on a significant number of dairy biomethane projects that are expected to come on line in the next few years. California is investing up to $260 million in dairy methane reduction efforts and many of these projects will

be seeking to produce biomethane for use as transportation fuel. AECA expects as many as 70-100 projects during the next 3-5 years and as a result is concerned about the proposed reduction in carbon intensity to 7.25 percent. Without markets and long-term stability dairy biomethane transportation fuel projects will be difficult, if not impossible to fully finance. AECA recommends keeping the 2020 target at 10 percent.

2. Credit Reductions above the CI and the Margin of Safety Mechanism

CARB proposes that the producer may establish a margin of safety. Per 95488.4 "A fuel pathway applicant may add a conservative margin of safety, of a magnitude determined by the applicant, to increase the certified CI above the operational CI calculated based on the data submitted in the initial fuel pathway application, to account for potential process variability and diminish the risk of non-compliance with the certified CI."

AECA recommends that the program share the value generated when a producer verifies carbon reductions beyond the provisional or certified CI, which would incorporate the margin of safety. Without knowing that the project can capture part of this value, project owners will limit their use of the margin of safety, increasing the likelihood projects are out of compliance at the end of the year and putting the success of the program at risk.

In the first two years, corresponding to the period of the provisional CI, we suggest sharing any verified emissions reductions above the projects margin of safety and/or provisional CI level, with 75% of the additional verified emissions to the project owner and 25% to the Buffer Account. After the initial 2-year period, we recommend a 50/50 split of any verified emissions above the certified CI and/or margin of safety value on an ongoing basis.

In early years, project producers will have the least knowledge and as a result are at greatest risk. The provisional CI is initially based on three months of data, and dairy project performance over this three-month period may vary substantially from the average for the year. The provisional CI will likely be more conservative than the actual project CI during this initial period, placing a material amount of project value at risk.

It is worth noting that this variation will also disproportionately impact California dairy projects. Given California's warm climate, its dairy digester inventory is predominantly made up of covered lagoon digesters which operate at ambient temperatures and have wide production variances based on season. By contrast, the majority of digesters in the rest of the country are plug flow and tank digesters, which have controlled temperatures and as a result will have less seasonal variation.

The 75/25 recommendation for sharing of the unused margin of safety/additional reductions in the first two years reflects the lack of initial experience by the industry and individual developers. It also takes into consideration the importance for projects to perform well financially from the start. Low initial returns may result in a project's failure to meet debt

payments and/or equity hurdles. It will also likely impact returns to the farm partner, whose payments are often subsequent to debt and equity. The failure to provide returns will limit subsequent project development. Sharing the value of additional emissions reductions in the provisional period rewards owners who are improving their CI score and helps ensure the long term success and stability of dairy RNG projects.

After the initial 2-year period, with significant project specific experience, and corresponding with the provisional CI being replaced with the certified CI, we recommend a 50/50 split. This would provide a simple sharing of credits between the project owner and the important buffer mechanism.

A failure to meet the required CI limit could be severe both to the individual project and the broader industry efforts.

3. Book and Claim Accounting

Section 95488.8 (i)(2) allows for Book and Claim Accounting. "RNG injected into the common carrier pipeline in North America (and thus comingled with fossil natural gas) can be reported as dispensed as bio-CNG, bio-LNG, or bio-L-CNG, or as an input to hydrogen production, without regards to physical traceability."

However, the proposed regulation also requires that "Entities may report natural gas as RNG within only a two-quarter time span." Further, the two quarter period doesn't begin at COD but reflects calendar quarters. "If a quantity of RNG (and all associated environmental attributes, including a beneficial CI) is pipeline-injected in one calendar quarter, the quantity claimed for LCFS reporting must be matched to natural gas sold in California as RNG no later than the end of the following calendar quarter."

AECA believes this will likely result in significant problems during project start up putting critical revenues at risk of loss. We encourage CARB to extend the two quarter period to start after the provisional CI is determined or some similar solution.

4. Temporary Carbon Intensity for Dairy R-CNG projects

Through Section 95488.9 (b) CARB provides an important Temporary Pathways mechanism. According to Table 8 "Temporary Pathways for Fuels with Indeterminate CIs" the value for dairy is proposed at zero (0).

We would strongly encourage CARB to review and adjust this value, since it doesn't take into account the methane destruction from a dairy project. A temporary CI may prove an important mechanism if a project specific pathway is delayed. We would recommend a value of -150, which is a conservative number reflecting the CIs for dairy digester projects determined to date.

5. Crediting Periods

According to the Manure Management Operations “draft” Guidance Document of 12-12-17, ARB is clear that a project is eligible to receive the full value of the CI for one crediting period, if the project began prior to the implementation of regulation of dairy methane. By way of example, if a project begins operation on 1-1-21 and regulations go into effect 1-1-25, the project would be eligible for its full CI value for the full crediting period (of 10 or 11 years based on the duration of the first reporting period). Similarly, if the regulations do not go into effect until 1-1-32, the project would be eligible for the full CI for two credit periods and thus through the end of 2040.

As it relates to carbon offsets we understand and concur with this approach. However, for LCFS credit generation, we ask that ARB reconsider this structure. As currently contemplated a project may benefit from a second 10-year crediting period and the stable long-term revenue streams that would accrue, however it cannot plan accordingly. AECA is seeking the distinction between cap and trade and the LCFS because electricity projects (in California) are eligible for 15 and 20-year electricity PPAs, and one 10- year crediting period, providing them with long-term certainty. Two 10-year crediting periods for biomethane projects will create a more balanced playing field and further encourage these transportation fuel projects with their associated local environmental benefits.

6. Regulatory Compliance

The 12-12-17 Draft Manure Management Operations Crediting Guidance Document includes a chart (page 5) "Areas of the Livestock Protocol Not Applicable or Excluded from LCFS Requirements." The chart includes “Regulatory compliance requirements” referenced under the protocol Chapter 3.7.

Inclusion of this exclusion from LCFS Requirements is important in the Proposed Regulation. AECA recommends that CARB include this exclusion directly in the Proposed Regulation or by appropriate reference to the guidance document. This is an important consideration for informing project risk and capital sources.

7. Utilization of Renewable Electricity

AECA seeks greater clarity on the ability for projects to utilize solar generation in a net energy metering arrangement to replace grid power to meet the energy requirements of biomethane clean-up, conditioning, and compression equipment. Greater clarity is needed to ensure renewable energy can appropriately be included in the CI calculation for proposed project pathways.

In conclusion, AECA appreciates the opportunity to offer these comments on the Proposed LCFS Regulations. We look forward to their consideration by CARB and to ongoing efforts to expand and encourage in-state development of biomethane under the LCFS program. As a result, AECA supports the need to develop a sustainable and stable long-term LCFS market.