SEVANA BIOENERGY

February 20, 2024

Matthew Botill
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Sevana Bioenergy Comments Regarding ISOR for the Low Carbon Fuel Standard

Dear Mr. Botill:

Thank you for the opportunity to submit comments in response to the Proposed Amendments (Proposed Rule) and associated Initial Statement of Reasons (ISOR) for the Low Carbon Fuel Standard (LCFS) released December 19, 2023. By way of background, Sevana Bioenergy develops RNG projects through design, construction, and operations, with strong partnerships and contributions to the local communities we serve. Our mission is to accelerate the production of RNG from anaerobic digestion facilities and contribute significantly to worldwide greenhouse gas reduction with net carbon-negative projects.

Sevana has staff based in California who have participated in the LCFS for nearly 15 years. We support the need for this rulemaking process to increase and extend LCFS targets that keep key successful elements intact, while enhancing the areas noted below. As you consider comments on this round of rulemaking, Sevana Bioenergy would like to offer the following feedback for your consideration.

Reduce the excess credit bank

Sevana Bioenergy applauds CARB's commitment to reducing carbon intensity and is pleased to see an initial proposed reduction target of at least 30% minimum and 18.75% step down for 2025. However, these targets remain lower than recommended in our letter from March 2023. In the meantime the credit bank has grown even faster than previously expected. The bank of over 20 million credits has depressed prices below the cost of production and return on capital needed to make ambitious investments in low carbon fuel sources and adopt lower emission vehicle technologies, stalling progress until these excess credits are absorbed and supply-demand balance reestablished.

We suggest the following three step solution to include in the final rulemaking:

Set the 2025 step down to 25%

We recommend a step down to 25% in 2025, or even by mid-2024. This magnitude of step down is essential to enable the LCFS to "catch up" and absorb the large supply of banked credits. This change could be implemented with minimal recycling of CARB's previous modelling as it would simply bring the targets in line with renewable diesel, electricity, and RNG utilization in California. This larger step down is also needed to mitigate the supply-demand balance impact from the new ULSD baseline (105.76). Without changing the 2030 target beyond the associated modelling, this near term step down demand signal is needed to sustain momentum to reach more ambitious targets proposed after 2030.

Strengthen the AAM's mechanics

We recommend three changes to the auto acceleration mechanism (AAM): First, allow it to take effect in 2027 (or 2026 if the 2025 step down remains less than 25%). Secondly, implement the triggering threshold when the credit bank is more than 2.0 times greater than the quarterly deficits generated, based on analysis by AJW and others that 3.0 is excessive. Finally, the AAM should allow for the program to trigger continuously (no "freeze" needed between years as currently proposed). These adjustments to the AAM will ensure it is effective enough to avoid repeat regulatory revisions and give sufficient confidence to market participants to make informed investments and long term commitments.

Consider increasing the 2030 target

Based on our review and independent runs of the CATS model, we note generally high cost and limited availability assumptions may skew the results to predict too high prices with too few substitutes. In the future, implementing learning curves and Monte Carlo scenarios across ranges of assumptions could provide additional insights for policy making. We respectfully propose CARB consider implementing at least a 35% target in 2030, especially if the AAM and step down above is not fully implemented. This would also better align the pre-2030 and post-2030 annual targets (vs back-end loading post-2030).

True-up Temporary Pathway Codes

A true-up remains necessary to properly recognize the true environmental performance of all pathways for Temporary Pathway Code (TPC) time periods. Under industry-standard carbon intensity sliding scale contracts the TPC's worse-than-actual carbon intensity disproportionately shifts economics away from producers during the critical "valley of death" shortly after startup but before provisional pathway revenues are realized.

Extending the proposed ISOR true-up to also apply to TPCs is a simple fix to ensure correct accounting for actual GHG benefits delivered so that producers have adequate economics to bring new fuel sources online.

Furthermore, the penalty for inadvertently overstated carbon intensities during the true-up should be revised to 1.25x rather than 4.0x to penalize but not bankrupt producers that do not achieve carbon intensity modelled with best available information but fall short due to factors outside their control.

Streamline Tier 1 Pathway calculators

We support improvements to the Tier 1 calculators to improve processing timelines and streamline verification currently requiring Tier 2 pathways. We would recommend the Tier 1 DSW model enable entering 0, 1, or more lagoon cleanouts per year based on verified inputs. We also support recognizing the latest science finding higher methane emissions are otherwise generated from organic waste prior to processing in anaerobic digestors.

Maintain avoided methane and deliverability mechanics

Sevana is developing projects both inside and outside California, with both carbon negative electricity and RNG pathways, so we are familiar with and not biased toward any specific fuel type or geography. Furthermore, RNG can be used to generate hydrogen and other low carbon fuels. The science-based, technology-neutral and inter-state commerce compliant framework of the LCFS make it a strong and tested policy.

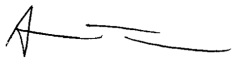
We recommend CARB maintain or extend the timeframes in the ISOR for eligibility of avoided methane deliverability. These mechanisms are supported by science and aligned with programs such as the RFS and other state LCFS. This will avoid tremendous risk of legal challenges, fuel shortages, higher emissions through

workarounds such as trucking rather than pipeline deliveries, and perpetuating the sustained usage of fossil fuels by arbitrarily hindering low carbon fuels.

Methane is one of the most powerful greenhouse gases with a potency nearly 30 times that of carbon dioxide. RNG projects capture methane including from livestock and organic waste that would otherwise be released to the atmosphere and thus reduce greenhouse gas emissions and improve air quality. California should employ all options available to help mitigate methane emissions.

We hope these comments and suggestions are helpful to consider in the final rulemaking.

Sincerely,



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