1017 L Street #513
Sacramento, CA 95814
(916) 588-3033
sam@rngcoalition.com

VIA ELECTRONIC FILING

October 16, 2024

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

Re: RNG Coalition's Comments on Low Carbon Fuel Standard 15-Day Amendments

Dear Mr. Botill:

The Coalition for Renewable Natural Gas (RNG Coalition) is a California-based nonprofit organization representing and providing public policy advocacy and education for the Renewable Natural Gas (RNG) industry.[1] RNG Coalition respectfully submits these comments to the California Air Resources Board (CARB) in response to the October 1, 2024 Second Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information for the Proposed Low Carbon Fuel Standard (LCFS) Amendments (Second 15-Day Package).

We thank CARB staff for continued adjustments to various RNG provisions in the Second 15-Day Package. Specifically, we support the expanded opportunities for RNG-to-electricity via fuel cells generation used in electric vehicle pathways. We recommend that same treatment be extended to other clean sources of power production, including linear generators.

We also support the updates to the Automatic Accelerator Mechanism. Triggering the AAM mechanism off a rolling quarterly assessment is preferable to using an annual look-back. Clearer timing of when the adjustment would impact the market should be supplied.

Other specifics of the 15-Day Package continue to create uncertainty about RNG investment. Programmatic ambition remains well below what would provide an appropriate response to the dire threat of climate change. Further, complex triggers on RNG deliverability rules and timing for reduced recognition for avoided methane crediting remain unclear. These arbitrary decisions have ensured there will be fewer RNG projects motivated by the LCFS and have limited how the RNG industry can contribute to California's methane reduction goals.

Sincerely,

/S/
Sam Wade
Director of Public Policy
Coalition for Renewable Natural Gas

---

[1] For more information see: http://www.rngcoalition.com/

Table of Contents

1 This Rulemaking Represents a Lost Opportunity for Climate Progress. Four Years of LCFS Uncertainty and Low Credit Prices Has Slowed Growth in All Low Carbon Fuels.

1.1 The Second 15-Day Package Should Be Adopted to Address Near-Term Oversupply. However, the Proposal Fails to Maximize LCFS GHG Abatement and is an Insufficient Response to the Magnitude of the Climate Crisis.

Climate change impacts are in the headlines again. Sacramento recorded the hottest temperature experienced in October since weather recordkeeping began (nearly 150 years ago) following a summer that contained the hottest 20-day stretch in the city's history.[2,3] The Southern portions of the United States were hit by devastating back-to-back hurricanes in just the past few days.[4] Ensuring that the LCFS is ambitious enough to continue California's leadership on clean fuels and match the magnitude of the climate challenge remains the most critical topic addressed in this rulemaking.

Incenting private capital to invest in a diverse portfolio of low carbon fuels to achieve all technologically feasible GHG reductions in a cost-effective fashion was previously a cornerstone of the LCFS program. CARB initiated discussion of how to increase LCFS targets almost exactly four years ago,[5] yet much of the period since has been spent probing (and at times degrading) these core programmatic concepts rather than building on prior LCFS success.[6]

Throughout this process, RNG Coalition and a diverse group of clean fuel voices contracted with the consulting firm ICF to independently analyze what level of greenhouse gas improvement is feasible from clean fuels and related sectors. ICF's work continues to show significantly different outcomes than CARB's analysis, especially with respect to the greater magnitude of greenhouse gas benefit that could be achieved by RNG and other clean fuels, the rate of drawdown of the credit bank, and associated cost and price trends.

Simply put, if all clean fuels were more clearly incented, greater GHG reduction—at less cost than predicted by CARB's analysis—would occur. Even with the constraints in the proposal through the Second 15-Day Package, the ICF work continues to show that a CI reduction of >40% by 2030 is feasible, which would be in-line with economy wide goals for GHG reduction.

The rule should be adopted as proposed at the November hearing, because the proposed increase in near-term stringency is needed to address near-term oversupply. However, CARB should also commit to returning to the rule to considering at least a 35% CI reduction by 2030 through a future rulemaking.

---

[2] https://www.sacbee.com/news/local/article293455944.html
[3] https://www.sacbee.com/news/weather-news/article290082049.html
[4] https://www.worldweatherattribution.org/yet-another-hurricane-wetter-windier-and-more-destructive-because-of-climate-change/
[5] See the October 14, 2020, CARB LCFS Workshop that discussed how to begin to improve the LCFS targets to align with the Governors Executive Order N-79-20 which states we needed to, "more quickly move toward our low-carbon, sustainable and resilient future." See: https://ww2.arb.ca.gov/sites/default/files/2020-10/101420presentation_carb.pdf
[6] Back in 2020 the LCFS was being praised for its effectiveness and seriously being considered by many other jurisdictions: https://ghginstitute.org/2020/01/22/the-low-carbon-fuel-standard-has-succeeded-but-how-does-it-work/#:~:text=So%20far%2C%20California%20has%20successfully,2018)%20with%20its%20LCFS%20program.

1.2 We Support the Auto Acceleration Mechanism Being Able to Trigger Earlier

The changes to the Auto Acceleration Mechanism (AAM) in the Second 15-day Package are positive. Evaluating the AAM on a rolling four quarter basis is more likely to detect oversupply more quickly than evaluating on only a calendar-year basis.

However, the implementation schedule post-trigger could be further clarified. For example, if the AAM triggers based on 2027 Q2 – 2028 Q1 (and CARB has all needed data on 7/31/2028), would the acceleration event trigger on 1/1/2029 or would it wait until 1/1/2030? We recommend that CARB staff develop and publish examples through a future guidance document and allow for the correction to trigger as soon as possible after an oversupply is detected.

2 Some of the Second 15-Day Package RNG-Related Changes Are Helpful, but More Clarity is Needed to Improve RNG Investor Confidence and Increase the Pace of Methane Emissions Abatement by 2030

2.1 Shift in Crediting Periods Allowed for Avoided Methane Needs More Clarification

We remain disappointed that CARB plans to reduce the total number of crediting periods for avoided methane emissions for RNG projects from three to two. This is an extremely problematic change as both agricultural and organic waste diversion projects are heavily dependent on LCFS revenue for profitability, driven by the avoided methane components of their CI scores, and recognition for this GHG benefit should not simply be ignored (as we've stated in prior comments, such credit should be given unless and until a replacement policy is put in place).

Providing *less* incentive to develop methane capture projects during the critical period between 2025 and 2030 seems counter to statutory direction and CARB's own goals. Attempting to recover capital costs over 20 years will mean that RNG projects built between 2025 and 2030 will need much higher LCFS prices, all else equal, than they would if they receive a full 30 years of avoided methane crediting. At low prices, LCFS revenue (with avoided methane recognition) cannot even cover operating costs in some cases. Even if LCFS prices recover more quickly, as suggested by the scenarios in Attachment C to the First 15-Day Package, fewer RNG projects will be viable because of this proposed change.

Further, while the Second 15-Day Package attempts to clarify when this transition from three to two periods occurs, it fails to fully alleviate concerns that existing projects will unintentionally be impacted. We request additional guidance from CARB on this topic. Taking away crediting periods from projects that are already built is classic change-in-law risk (colloquially called "stroke-of-the-pen" risk when government acts in an arbitrary fashion) a concept we warned against in detail in our informal workshop comments back on December 21, 2022.[7]

For the initial years of the LCFS, prospective low carbon fuel producers included anticipated credit revenue in financial models and the investors would ignore or heavily discount the LCFS line item, due to perceived change-in-law risk. CARB should be motivated to do all it can to avoid this prior paradigm of

[7] https://www.arb.ca.gov/lists/com-attach/74-lcfs-wkshp-nov22-ws-U2FSZlNjWThWYgMy.pdf

market distrust. Unfortunately, this rulemaking has instead reignited these fears and soured many clean tech investors on the program.

2.2 Deliverability Trigger is Impossible to Predict

The Second 15-Day Package's changes to deliverability requirements are also still problematic for RNG development. The new proposal is to trigger the timing of deliverability requirements for RNG to natural gas vehicle pathways based on medium- and heavy-duty zero-emission (ZEV) and near-zero-emission (NZEV) vehicle penetration.

While we understand conceptually that CARB may not want RNG to be used in natural gas vehicles if ZEV penetration goals succeed, and we support ZEV uses of RNG, the trigger itself is not something that RNG developers are comfortable predicting. Because LCFS crediting requires having an established end use for the RNG (to receive pathway approval) and because projects need to understand eligibility for federal Renewable Fuel Standard credits, investment in methane reduction cannot be made with much certainty based on this trigger.

Given that California clearly benefits from broad North American and global energy markets for other types of energy—and the recent trend toward significant increases of the California-based supply of RNG,[8] with in-state production increasing from 6.74% in 2021 to 18.23% in 2023—we continue to question why CARB would propose eliminating imported RNG eligibility from any portion of the North American gas system.

All RNG projects produce the desired benefits of displacing fossil gas, and most create significant methane reductions. Achieving these benefits should remain the primary focus for California RNG policy. RNG stakeholders will be happy to engage further with CARB staff on this topic.

2.3 4-to-1 Penalty Should be Eliminated

It is disappointing to see the Second 15-Day Package retains a "4-to-1" penalty for the case where a verified CI is higher than the certified CI. This is overly punitive. We continue to recommend that, if the verified CI is higher than the certified CI, the project should simply repay CARB for any excess credits claimed, and not be subject to any further enforcement liability (unless there is malfeasance or other such separate cause).

2.4 Linear Generators Should Be Treated Like Fuel Cell to EV Pathways

We are happy to see changes in the Second 15-Day Package encouraging RNG to be provided to fuel cells for power generation when that power can be matched to electric vehicle use. We believe this combination of clean technologies has multiple "wins" for the environment—both from a criteria pollutant and GHG reduction perspective.

The framework for RNG/biogas to power to EV pathways could be further improved by allowing other forms of low-emission gas power generation to use the same accounting framework. Power production matched to EVs is generally an option RNG Coalition members want to have available. We continue to encourage ARB to approve a temporary pathway for other forms of electricity (e.g., generated by biogas

[8] https://ww2.arb.ca.gov/resources/documents/lcfs-data-dashboard

on site through non-fuel-cell technologies, generated at the best combined cycle plants, etc.). When no temporary pathway at all exists for these projects, they cannot take advantage of the true-up opportunity created by the new rule and are, therefore, much harder to finance.

We would prefer to see technology-neutral performance metrics so that power generation that meets similar efficiency and/or emissions profiles as fuel cells are equally recognized. For example, linear generators are now serving truck charging demand at The Denker Hub associated with the Port of Long Beach.[9] At a minimum, this technology should be treated in an equivalent fashion to fuel cells.

Such pathways also demonstrate the importance of flexible accounting mechanisms for both renewable gas and power. RNG suppliers are smaller sources of gas, each fuel cell's gas demand is individually modest and distributed (compared to the average utility-scale gas power plant), and EV load is also often distributed. Only through flexible accounting mechanisms—like book-and-claim for both gas and power—can this useful combination of technologies be properly recognized and incented under the LCFS.

3 Conclusion

RNG Coalition appreciates the opportunity for continued engagement on these topics and CARB's timely release of the Second 15-Day Package. CARB should adopt the Proposed Rule in November. While imperfect, the proposed rule can still help leverage renewable gas production to reduce methane emissions, improve organic waste management, and decarbonize California's transportation sector.

We thank CARB for your continued work toward these goals and look forward to the successful conclusion of the LCFS rulemaking and future continued work on the issues identified above.

[9] https://www.prologis.com/insights/success-stories/north-americas-largest-heavy-duty-ev-charging-hub-powered-microgrid