December 13, 2024

Adam Saul
Washington Department of Ecology
300 Desmond Drive SE
Lacey, Washington

Re: Notice of Opportunity to File Informal Comments on Proposed Update to Clean Fuel Standard Program Rules (173-424 WAC)

Dear Mr. Saul,

The Coalition for Renewable Natural Gas (RNG Coalition) submits the following comments for consideration by the Washington Department of Ecology (Ecology) during the fourth informal comment period for the Clean Fuel Standard (CFS) rulemaking (173-424 WAC).[1]

RNG Coalition represents and provides public policy advocacy and education for the renewable gas industry across North America. Our organization supports the development and use of renewable natural gas (RNG, also known as biomethane), biogas, clean hydrogen, and renewable CO_2 as decarbonization solutions for various sectors of the economy.

Our organization includes over 400 members, including municipalities, universities, and leading companies operating in each sector of the industry. We appreciate Ecology's dedication in soliciting stakeholder feedback on RNG throughout the rulemaking process.

Oppose Arbitrary Limits to Avoided Methane Crediting Framework

We are strongly discouraged to see Ecology consider arbitrary limits on the avoided methane crediting for RNG projects. Methane is a critical short-lived climate pollutant and reducing methane through RNG deployment has been a key success story associated with clean fuel programs in other jurisdictions.

Agricultural and organic waste diversion RNG projects are heavily dependent on CFS revenue for viability, and the CFS benefit is driven by the avoided methane components of their carbon intensity scores. Recognizing RNG's avoided methane emission benefits are critical to motivating RNG project construction and the best environmental outcome from each RNG project. By reducing or removing avoided emissions crediting for methane, Ecology is simply ignoring one of the key levers to slow near-term warming.

Avoided methane crediting is often needed to satisfy both capital repayment requirements for new projects and, in some cases, covering operating expenses for existing facilities. This is especially true in the lower credit value regime in which the Washington program is currently operating.

The draft rule's reduced avoided methane crediting schedule is not supported by any analysis of how these limits impact RNG project economics. For example, the rule package does not make clear why Ecology believes a project built before 2009 will be able to continue operating (and serving the CFS) with

[1] https://ecology.wa.gov/getattachment/02bb32f5-c6d3-45ff-94fa-eee3008fddba/WSR-24-01-089.pdf

no avoided methane credit recognition; a project built between 2009 and the end of 2022 will have its crediting period reduced by one year per each year dating back from 2022 and still prosper; and a project that breaks ground after 2023 can be limited to two seven and a half year periods of avoided methane recognition to be viable. These phaseout decisions seem to be selected in an arbitrary fashion and without any sufficient economic or policy rational and are simply unworkable.

This strange phaseout schedule gives developers significantly increased fear of "stroke of the pen" risk—the investment framework shifting in an unpredictable and arbitrary way. Such risk is extremely problematic and undermines the core goals of market-based programs designed to attract private capital. The arbitrary nature of this proposal, paired with the current low-priced credit environment, has serious potential to deter RNG producers from participating in the program at all.

Washington can best incentivize new RNG projects without any phase-outs for avoided methane credit. A conceptually stable CFS program that inspires confidence in market participants will encourage continued project growth as the demand for clean fuel grows. If Ecology wants methane abatement from sources such as agricultural waste, organic waste diversion and landfill gas capture, Ecology must convince the clean fuel investment community that RNG will be a viable and important contributor to the CFS framework.

The concept of "start date" additionality tests, which may be appropriate in other contexts, is not appropriate for RNG and biogas-to-power facilities. This is because the capital expenditure/operational expenditure (CAPEX/OPEX) profile of the biogas/RNG space is fundamentally different from other renewable energy assets, such as solar and wind. Solar and wind production generally have a much higher CAPEX requirement compared to OPEX requirements. Thus, solar and wind projects once built tend to keep running.

Biogas and RNG facilities are fundamentally different because they require both significant upfront capital investment and proportionally higher ongoing OPEX outlay on staffing, process energy procurement, logistics of feedstock procurement and digester cleanouts, maintenance, and replacement of rapidly amortizing assets such as compressors, etc. **We would be happy to confidentially share details on project economics with Ecology to further explain how methane crediting makes projects viable.**

Looking at the existing RNG facilities fleet in the state today, Washington has not yet been successful in promoting much RNG growth, despite a general policy directive that supports methane reduction, and state programs (like the CFS) that are nominally designed to promote RNG investment. According to Washington's most recent GHG Inventory,[2] waste management (solid and wastewater) and manure management still contributed a combined emission of 3.9 MMT CO_2e in 2019. These represent significant methane sources that can be abated through the deployment of RNG projects.

Removing credit for avoided methane is simply poor greenhouse gas (GHG) accounting if no requirements to control methane is separately developed. In no other place does Ecology's CFS simply ignore GHG benefits (or disbenefits) in the lifecycle of a fuel. Opponents of recognizing RNG's avoided methane benefits in the CFR often portray the lifecycle analysis framework for methane from organic waste as if it is outside of the norm or misaligned with other leading jurisdictions' GHG accounting. This is not true. Similar accounting was first pioneered in the European Union's Renewable Energy Directive

[2] https://apps.ecology.wa.gov/publications/documents/2202054.pdf

(RED) before adoption into US Clean Fuel Programs (CA LCFS and Argonne GREET). Successful frameworks recognize that it is irresponsible to propose an arbitrary phase-out of avoided methane crediting for existing projects without a detailed plan for developing a supporting replacement policy to ensure that methane reductions from existing projects continue. RNG project that do not have economics sufficient to cover their OPEX shut down and revert to flaring (or worse venting) unless a farmer is required to continue to control the methane.

For example, in the most recent LCFS rulemaking, California debated limits on avoided methane credit, but that debate was predicated on a discussion of switching to mandatory control requirements for sources such as dairy manure methane. We are unaware of any similar conversation underway in Washington (or anywhere else outside of California); therefore, Washington should not adopt a less attractive (and much more arbitrary) avoided methane crediting phaseout schedule than California. Doing so will simply stimy RNG growth driven by the WA CFS and delay methane abatement.

California's consideration of changes to avoided methane also came after a sustained period of successful in-state RNG buildout. Conversely, we are not aware of any Washington anaerobic digester projects currently serving the Washington CFS. According to RNG Coalition data, there is only one anaerobic digester facility in operation in the state that produces RNG for transportation fuel, which is directed to the California market (as well as landfill projects that used to serve the CA program). This is in contrast to over 100 projects in California.

Considering this historical view, it appears that California's framework (which offered three ten-year crediting periods historically) was helping Washington achieve its goals more than the WA CFS has thus far. While this may be a near-term positive result from Washington's perspective, the long-run consequence of Washington inappropriately offering less avoided methane credit will be that less abatement overall occurring in-state and clean fuels produced in Washington serving other markets, potentially increasing transport emissions and creating other negative consequences.

Finally, we understand that an unspoken rationale behind this proposal may be a desire to increase credit prices by diminishing RNG credit supply. Again, this is a flawed strategy if methane reductions are desired. We believe that instead of promoting arbitrary and incorrect GHG accounting to diminish credit supply, Ecology should instead consider pursuing a legislative correction to increase the program's ambition. The RNG industry would support such a fix, as we strongly support any state's commitment to developing a robust alternative fuels sector and progressive methane reduction policies.

Regionality and/or Deliverability Limits Creates Barriers to Imports and Should Not be Adopted

We believe that changes to deliverability requirements are also problematic for RNG development, both inside of and outside of Washington. Book-and-claim accounting is a well-established method for tracking RNG, as it is not possible to physically segregate delivery of renewable gas once it is intermingled with fossil gas in the pipeline system, and book-and-claim does not need to be supplemented by directional flow requirements for pipelines.

The RNG deliverability requirements in the recent California LCFS rulemaking are not an improvement to the prior accounting practices and should not be conceptually copied by Washington. It is impossible for an RNG developer to understand which pipelines will meet percentage flow requirements, as pipeline directional flow can change over time—especially if we are able to wean ourselves off fossil gas and the system begins to be dominated by renewable gas flows in the future. Unless Ecology can produce a map

of exactly which pipelines are eligible, out-of-state developers will not have the investment certainty needed to serve Washington and the deliverability requirement will serve as a de facto RNG import ban.

Further, other deliverability concepts that could be substituted still create additional cost for no environmental benefit. For example, requiring an RNG developer to hold long-term firm pipeline capacity from production source to end-use does not ensure that the renewable molecules flow in that path. Instead, it only adds additional costs because it does not allow market participants to take advantage of liquid supply trading hubs and pipeline displacement, which can significantly bring down the cost of RNG supply. This is why the book-and-claim accounting method has emerged as the preferred method in most other systems that have successfully promoted RNG growth globally.[3]

Washington has benefited from California's book-and-claim rules because Washington RNG projects were developed to serve California's LCFS. Why should Washington not reciprocate that treatment and allow projects in other states (that may wish to follow Washington and California but have not yet politically been able to do so) to gain traction thus, developing both a lower cost of RNG supply to Washington and a constituency for climate action in the supplying jurisdiction? Washington actively seeks linkage in the Cap-and-Invest context and the "gains from trade" logic for pursuing linkage is the same for allowing fair import of RNG produced in other states.

Washington also imports much of its fossil gas.[4] Given that Washington benefits from North American energy markets for conventional gas, we request the same "open border" treatment for renewable gas. 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 Washington's RNG policy, rather than trying to impose deliverability limits that do not match the reality of the gas system.

It is also essential for the Washington CFS book-and-claim rules to allow for consistent claims in RNG volumes across the Renewable Fuel Standard (RFS) and the CFS. Other approaches will inherently create misalignment in claims, leading to administrative confusion, reduced net incentives, and fewer financially viable projects.

RNG as an Input to Sustainable Aviation, Marine Fuel and Hydrogen

We support Washington's commitment to developing a sustainable aviation fuel (SAF) hub in the state. Components of this regulatory proposal are clearly designed to support legislative direction to develop RNG-to-SAF pathways. However, such pathways are highly undermined by the issues outlined above (poorly conceived avoided methane and deliverability frameworks). Similar concerns exist for use of RNG in marine fuels.

We also appreciate that Ecology has considered the value of RNG as an input for renewable hydrogen. Most hydrogen is currently derived from fossil gas, so it is particularly wise for Ecology to account for the GHG impacts of hydrogen production while also considering the need for ample hydrogen fueling infrastructure expansion. Allowing for RNG to be matched to steam methane reformation and emerging

[3] S&P Global Commodity Insights, *Renewable Gas Tracking Systems – Value of Biomethane/RNG Certificates* 2024 https://www.rngcoalition.com/renewable-gas-report-sp

[4] https://www.eia.gov/state/analysis.php?sid=WA#:~:text=It%20has%20a%20total%20storage,storage%20field%20in%20the%20nation.&text=Canada%20supplies%20most%20of%20the,that%20is%20originally%20from%20Canada.

hydrogen production technologies, such as methane pyrolysis, will continue to push hydrogen production emissions lower as hydrogen fueling infrastructure and use proliferates.

Establishing a "True Up" Mechanism

We strongly support the "true up" concept that properly recognizes the true GHG benefits of all low carbon fuels. This true up helps address the under crediting currently experienced by RNG projects as they await pathway approval. This proposal will help streamline the application review process, alleviate or mitigate any business impacts associated with a delay in pathway certification, and allow for the recognition for the full climate benefits of a fuel.

Conclusion

RNG Coalition continues to appreciate the opportunities provided by Ecology to engage on these topics. We sincerely believe that some of the proposed amendments to Washington's CFS will be a boon to the program, but others are extremely problematic. Specifically, we hope that Ecology reconsiders any arbitrary and poorly constructed limits on avoided methane crediting and RNG delivery.

Properly recognizing RNG's benefits, and making it possible to match RNG suppliers to buyers through clear accounting, will help meet the state's decarbonization goals by bringing RNG industry investment more fully to Washington and driving methane reductions. We thank the Department for your continued work toward this end.

Sincerely,

/s/

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