State of Oregon Department of Environmental Quality

Written Comments

Clean Fuels Program 2024 Rulemaking Workshop 2

This document is a compilation of written comments received in response to the workshop that was held on July 9, 2024.

Comments

July 31, 2024

VIA ELECTRONIC FILING

Bill Peters
Oregon Department of Environmental Quality
700 NE Multnomah St #600
Portland, OR 97232

Re: Proposed OR-GREET 4.0 Updates to Clean Fuels Program

The Coalition for Renewable Natural Gas (RNG Coalition) submits these comments to the Oregon Department of Environmental Quality (DEQ) in response to the OR GREET 4.0 Model Updates to the Clean Fuels Program (CFP). The RNG Coalition represents and advocates on behalf of the renewable gas industry.

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. We comprise 404 members—cities, counties, airports, ports, municipalities, colleges, universities, and leading companies operating in each sector of the industry—including those who capture, clean and condition more than 95% of all RNG in North America.

Regional Alignment and Reciprocity of CI Scores Should Be a Key Goal

We strongly encourage synergy among existing CFS programs—thus we recommend that states allow reciprocity for carbon intensity (CI) pathways approved by other existing state programs. We are pleased that DEQ continues to conceptually align many of its GREET model updates with California's and is proposing the adoption of updated simplified OR Tier 1 calculators.

Regional alignment will maximize the ability for RNG producers to swiftly respond to the joint signal sent by multiple clean fuel programs. Significant attention should be placed on retaining cross-jurisdictional alignment of CI tools and scoring. Continued dialog between California, Oregon, and other active clean fuel jurisdictions—such as Washington, New Mexico, British Columbia, and Canada—on these topics will lead to the best outcomes for GHG reductions.

The majority of RNG pathways should be Tier 1 to reduce complexity and improve pathway processing timelines. We are committed to working with DEQ to help achieve these goals.

CI Calculator of Biomethane from Anerobic Digesters Should Include Default Co-Product Credits for the Benefits of Displaced Fertilizer

The development of anaerobic digester (AD) facilities to process diverted organics increases opportunities to displace the use of emission-intensive conventional fertilizer with digestate-derived fertilizer products. We recommend that the Tier 1 calculators for Organic Waste Biomethane and Dairy

and Swine Biomethane be updated to recognize the nitrogen, phosphorus, and potassium (NPK) benefits of the digestate material.

Co-product credits for digestate/compost have previously been granted by CARB in certain Tier 2 pathways based on the amount of conventional fertilizer displaced.[1] DEQ should work with CARB to establish a harmonized version of this important AD co-product credit in the Tier 1 Calculators for Organic Waste Biomethane and Dairy and Swine Biomethane.

All Biomethane Pathways Should Include the Option to Model Power Generation Matched with Electric Vehicle Use as a Finished Fuel

We recommend that all Tier 1 calculators allow electricity generation as a finished fuel to facilitate matching with electric vehicle (EV) use. Alternatively, DEQ could develop a Tier 1 calculator that takes a RNG pathway as an input and converts it to electricity for use in EVs (like how CARB plans to allow book-and-claim RNG as an input to hydrogen pathways).

Renewable Natural Gas Facilities Need Flexibility to Source Renewable Power as an Input to RNG Production

A significant share of energy demand at many RNG facilities is electricity used to power gas cleanup equipment. We support the option to use low-CI electricity as an input that exists in many of the draft biomethane Tier 1 calculators.

However, we do not support limiting low-CI electricity inputs to power produced on site. The challenge of generating one's own renewable power on site is related to the cost and risk multipliers that are triggered when one must simultaneously develop both an RNG production facility and a renewable power project capable of matching the load of the RNG plant. Instead, DEQ should allow RNG producers to source grid-supplied low-CI electricity—either under specific Power Purchase Agreements (PPAs) or book-and-claim renewable energy certificates (REC) retirement.

A Harmonized Credit True-up Would Help Properly Recognize the True Environmental Performance of All Biomethane Pathways

As Oregon has previously recognized, true-up crediting can be offered post-verification to improve clean fuel economics and help the program correctly account for the full GHG benefits of RNG production. AD facilities are biological systems, and therefore, yield and CI can be unexpectedly impacted by issues outside of the control of the facility operator.

Looking backward at actual CI performance is much easier than forecasting possible future CI performance for these systems. We would like to see Oregon and California discuss how to develop a harmonized full true up methodology to verified actual CI performance to recognize the actual GHG benefits of these facilities.

Conclusion

[1] https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/t2n-1248_summary.pdf

RNG Coalition appreciates the opportunity for continued engagement on these topics. Providing strong and streamlined CI tools improves the investment certainty for RNG projects. If DEQ provides clarity through Tier 1 calculators that work well for RNG applications, the production of renewable gas will help to reduce methane emissions, improve organic waste management, and decarbonize Oregon's transportation sector—or any other sector that DEQ deems appropriate.

These simplified Tier 1 calculators also provide critical leadership that will allow other jurisdictions to follow the West Coast's example and adopt LCFS-style programs. We thank DEQ staff for your continued hard work on these topics and look forward to a robust and effective CFP rulemaking.

Sincerely,

/S/

Sam Wade
Director of Public Policy
Coalition for Renewable Natural Gas
1017 L Street #513
Sacramento, CA 95814

NATIONAL OILSEED PROCESSORS ASSOCIATION

1310 L Street NW Suite 375 • Washington DC 20005
phone 202.864-4365 • fax 202.842.9126
nopa@nopa.org • www.nopa.org

July 31, 2024

Bill Peters
Oregon Department of Environmental Quality
700 NE Multnomah St., Suite 600
Portland, OR 97232

Via electronic submission

Re: Department of Environmental Quality Draft Oregon GREET 4.0 Calculator

Mr. Peters:

Thank you for the opportunity to comment in response to the Oregon Department of Environmental Quality's (DEQ) Oregon GREET 4.0 (OR-GREET) Memo and Draft Calculator as part of the 2024 Clean Fuels Program (CFP) Rulemaking. The National Oilseed Processors Association ("NOPA") appreciates being able to share our observations. NOPA members have a vital interest in these issues.

Organized in 1930, NOPA represents the U.S. soybean, canola, flaxseed, safflower seed, and sunflower seed-crushing industries. NOPA's membership includes 16 members that are engaged in the processing of oilseeds for meal and oil that are utilized in the manufacturing of food, feed, renewable fuels, and industrial products. NOPA member companies operate a total of five softseed and 62 solvent extraction plants across 21 states. NOPA members crush approximately 95% of all soybeans processed in the U.S.

NOPA supports Oregon's CFP which drives demand for biodiesel, renewable diesel and sustainable aviation fuel (SAF), and encourages investment in low carbon feedstocks and value-added agricultural opportunities. We also appreciate the work that the Oregon DEQ is doing to update OR-GREET.

As the DEQ considers updating OR-GREET 3.0 to OR-GREET 4.0, it should take the opportunity to address the inconsistent application of the GREET Carbon Calculator for Land Use Change from Biofuel Production (CCLUB) when assessing indirect land use change (iLUC) values for different biofuel feedstocks under the CFP.

Current practice under the CFP assigns corn-based ethanol an iLUC value based on the CCLUB model, but not other feedstock pathways, including soy-based biodiesel, which are estimated using the GTAP and AEZ models. CCLUB was developed by Argonne National Labs as part of the GREET model, the base model under the CFP, is updated regularly, and generates a range of iLUC values for multiple feedstock pathways including soy-based biodiesel. Consequently, NOPA urges the DEQ to take this regulatory opportunity to uniformly apply the use of the CCLUB model for all feedstocks under OR-GREET, including soy-based biodiesel.

NOPA is eager to continue working with DEQ to support the role of agriculture in diversifying the fuel supply through more sustainable feedstocks and thereby supporting cleaner fuel options in Oregon and

beyond. On behalf of America's soybean processors, we appreciate this opportunity to comment, and look forward to collaborating with DEQ and other relevant stakeholders to enact policies that will address climate change while expanding the use of soy-based biofuels and market opportunities for soybean farmers.

Sincerely,
Kailee Tkacz Buller

Kailee Tkacz Buller
President & CEO
NOPA

July 31, 2024

VIA ELECTRONIC FILING

Bill Peters
Oregon Department of Environmental Quality (DEQ)
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Re: Clean Fuels Program (CFP) 2024 Rulemaking Workshop 2

Dear Mr. Peters:

Neste appreciates the opportunity to provide these comments on the Clean Fuels Program (CFP) 2024 Rulemaking Workshop 2 presented by DEQ on July 9, 2024. Neste is the world's largest producer of renewable diesel (RD) and sustainable aviation fuel (SAF), over 90% of which are produced from waste and residues. During the past ten years, Neste's transformation journey has taken it from a local oil refiner to a global leader in renewable and circular solutions. Neste's goal is to achieve carbon neutral production by 2035 and supply Oregon with products that will enable the state to reach the climate goals outlined in Executive Order 20-04. We are in the business of combating climate change by producing effective climate solutions, and our vision is to create a healthier planet for our children.

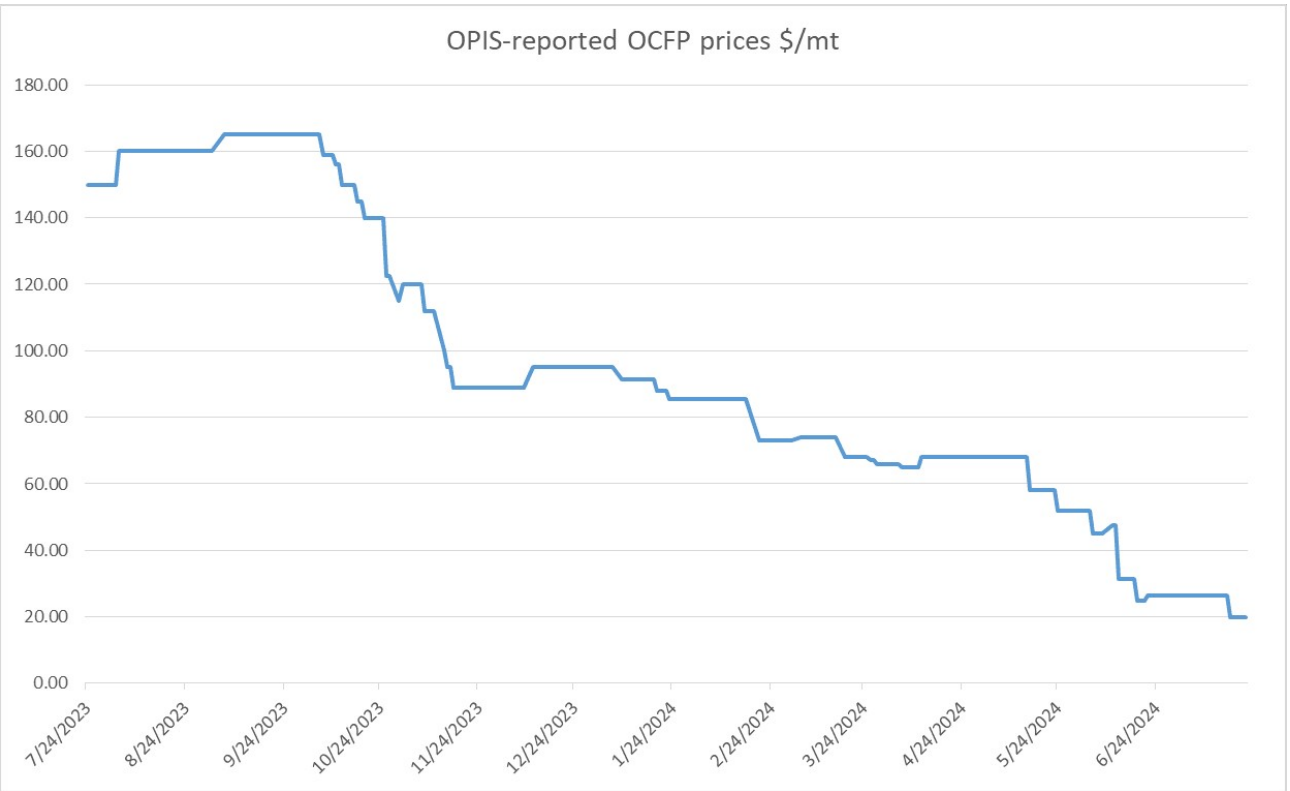
The comments below are regarding materials provided by DEQ in the July 9, 2024 CFP 2024 Rulemaking Workshop 2 package. We look forward to continuing to work with DEQ on this rulemaking.

Step Down Carbon Intensity (CI) Reduction Is Needed Immediately to Stabilize the CFP Carbon Market:

The beauty of open markets is the price reflects the overall view of all participants. The recent sharp price declines of the Oregon CFP credit price demonstrate that the market firmly believes the current program goals are too easy to achieve. The market price is reflecting the broad belief that there are too many credits available today and the demand for those credits is not going to outpace supply any time in the near future. Oregon CFP credits have traded below $20/mt in recent weeks as market participants firmly believe that the ongoing rise in the credit bank will only continue (See Figure 1 below).

Weaker credit prices in related carbon programs, such as California's Low Carbon Fuel Standard (LCFS) program, have only increased the supply of renewable fuels in Oregon and weakened Oregon's credit market. Ongoing weakness in these credits will discourage investing in new technologies that can help speed the energy transition and instead send signals that regulators support the status quo of low interest in investing in new low-carbon technologies. The plunge in credit prices to around $20/mt from even one year ago when prices were $165/mt shows a risk of investment in clean technologies, resulting in the slow down or actual exit of the state's lower-emissions energy sources as they become uneconomical. Market participants who are holding credits are selling them at lower and lower prices because the supply of Oregon CFP credits continues to outpace demand, as reflected by the continued increases in the credit bank quarter after quarter. Current market prices reflect the belief that CFP credit supply will remain above demand in the coming quarters, and the longer Oregon waits to address this overperformance the longer it will take to resolve it.

Figure 1: Oregon CFP Credit Price Since August 2023 Through Today



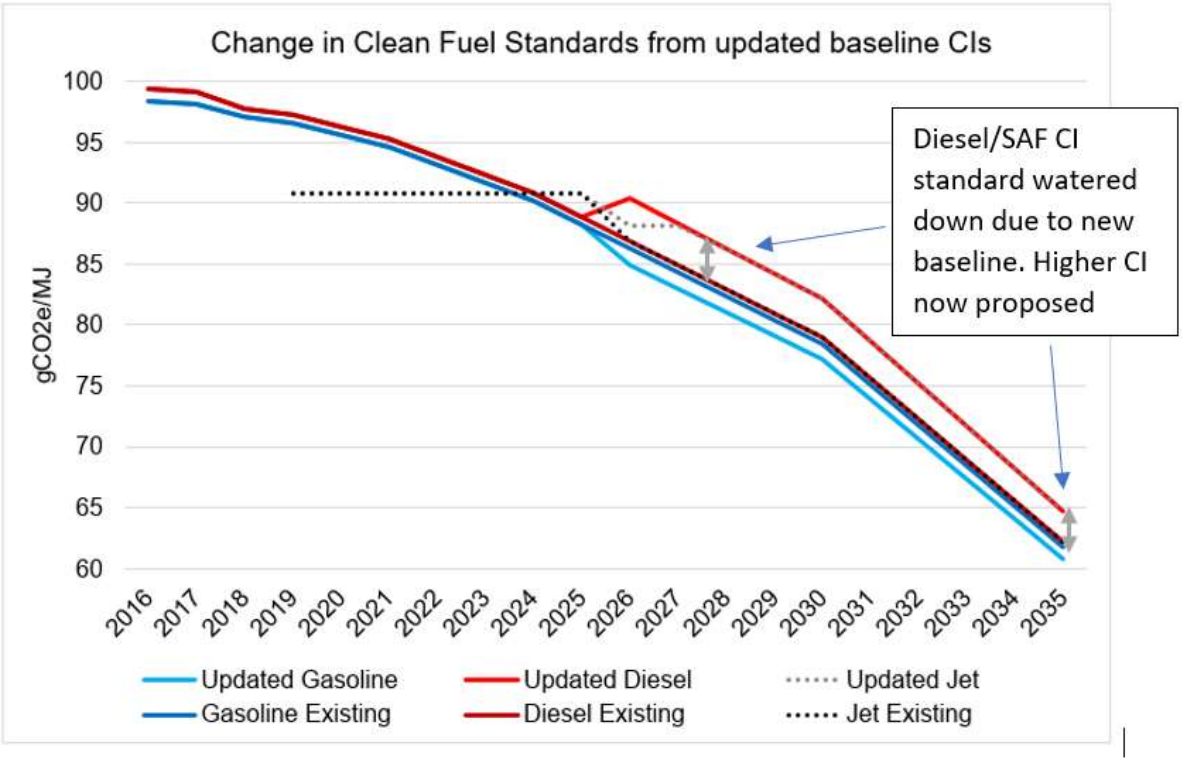
Neste sees an immediate step down in the CFP CI as integral to quickly addressing the overperformance of the CFP program and the depressed credit prices. This could also provide visibility to the industry that could bolster investments in future alternative energy projects. Overperformance is a lost opportunity for GHG reductions, and the longer the market overperforms, the longer Oregon passes up significant reductions in GHGs and harmful air pollutant emissions. Neste supports a CI step down of at least 9% for 2025 as is being considered for the California LCFS[1] to account for the 3% CI increase of the diesel baseline and to address the current Oregon CFP significant overperformance. For California, ICF found that a CI reduction of 25% in 2025 is needed to "ensure that the credit bank reverses and that the bank is drawn down to a level that is in line with a credit bank of only two quarters' worth of deficits"[2]. Overperformance in the CFP has contributed to the large decrease in Oregon CFP credit prices, and this is further compounded by overperformance in California that continues to have a spillover effect in Oregon. Therefore, a step down higher than 9% is possible in Oregon given the even lower credit price in the Oregon CFP compared to the California LCFS.

As part of this rulemaking, DEQ also updated the fossil diesel baseline from 101.74 gCO_2/MJ to 104.92 gCO_2/MJ, a 3% CI **increase** that waters down the CFP CI reduction goals proposed back in the CFP Expansion 2022 rulemaking[3]. The watering down of the diesel CI is very clear in the figure included on page 4 of the "OR-GREET 4.0 Memo"[4] prepared by DEQ for this workshop (See Figure 2 below), which clearly shows the program de-accelerating by up to 2 years. Figure 2 below shows the newly proposed diesel CI reduction (top light red line) having a less aggressive CI reduction than what was previously proposed by DEQ in 2022 (bottom darker red line), resulting in the 2025 CI reduction goal now being similar to the previously

[1] https://ww2.arb.ca.gov/sites/default/files/2024-04/LCFS%20April%20Workshop%20Slides.pdf
[2] https://www.arb.ca.gov/lists/com-attach/7078-lcfs2024-VDVcNFIyVGsLdFQu.pdf
[3] https://www.oregon.gov/deq/rulemaking/pages/cfp2022.aspx
[4] https://ormswd2.synergydcs.com/HPRMWebDrawer/Record/6773511/File/document

approved 2023 goal. Neste has estimated that this watering down of the diesel CI standard will result in more than 500,000 extra credits annually starting in 2025, worsening the already large credit bank. The 1.192 million credits available in the bank represent an oversupply that will continue to grow if current targets are maintained, and will grow more rapidly if the diesel compliance curve is weakened by adjusting the baseline carbon intensity without a corresponding step down in the compliance curve. Therefore, Neste recommends that **a CI step down of at least 9% CI must be made in 2025**.

Figure 2: Updated CFP CI Reduction Goals from "OR-GREET 4.0 Memo"



Neste would also like to request copies of the calculations used to recalculate the updated CI's, especially the updated fossil fuel baselines. The fossil diesel baseline changed by 3.18 gCO_2/MJ and Neste expects a change closer to 2.74 gCO_2/MJ based on the methodologies described by DEQ. We therefore request all calculations used to recalculate all updated CIs.

The CFP Needs an Automatic Acceleration Mechanism (AAM):

In the current environment, where the credit price is at historic lows and the credit bank is at a record 1.192 million credits, it is important that adjustments to the CI reduction targets are made through a predictable process and send credible, long-term signals to the market. Neste therefore recommends that DEQ incorporate an AAM into the CFP that will move up the CI standard by one year (and subsequent years) when triggered, resulting in a predictable impact on the longer-term fuel market. California is also considering such a mechanism, and the Oregon CFP would benefit from it even more given the impacts of the overperforming California LCFS in Oregon. In years that Oregon and/or nearby LCFS programs are overperforming, the AAM will allow DEQ to adequately address overperformance in the credit market and thus maximize emissions reductions.

Given the significant credit bank and the expected growth in renewable energy consumption in Oregon, Neste recommends that the AAM first be activated in **2025** (using 2024 data). It is essential that DEQ have this mechanism in place should overperformance persist, and to balance out the credit market more quickly so that renewable fuel producers can feel more confident investing in new production.

Climate Smart Agriculture (CSA) Can Drive Further Decarbonization:

Neste also believes that DEQ can further drive innovation by recognizing the emissions reductions from climate smart agriculture (CSA). These emissions reductions are already being certified and accounted for through several sustainability certification schemes such as ISCC. In fact, the IRS guidance accompanying the 40B SAF-GREET model allows some crop-based feedstocks to reduce their carbon intensity (CI) score if certain CSA practices were employed in their production. CI reductions for no-till, cover crop and enhanced efficiency fertilizer will be accounted for in CI calculations. Neste believes that recognizing CSA strikes the right balance between ensuring feedstocks are sourced sustainably and at the same time leverages available data to provide more value to those producers that are working towards decarbonizing their energy production.

Additional Proposals to Consider:

Neste suggests that DEQ consider these additional opt-in sources of credit generation that are "drop-in" fuels that do not require significant infrastructure or investments to implement.

- **Ocean Going Vessels (OGVs):** Facing increasing CI reduction targets proposed by the International Maritime Organization (IMO), shipping companies are looking to renewable fuels as a way to reduce their emissions. DEQ should consider including fuel used in those ocean going vessels within the CFP to support and accelerate the decarbonization of large container ships, tankers, and other OGVs.
- **Rail Opt-in:** The rail sector has indicated to Neste an interest in using lower carbon fuels if incentivized under the CFP. As a direct drop-in replacement of fossil diesel, renewable diesel could play an important role in decarbonizing the rail sector in Oregon if allowed as an opt-in fuel and incentivized by the CFP. Should the rail industry use renewable diesel, nearby communities would see added co-benefits of lower criteria and toxic air pollutant emissions.
- **Stationary Generators Opt-in:** The past several years have seen significant growth in the installation of stationary backup generators in several states, including Oregon. Operators of stationary generators have expressed to DEQ and Neste a strong interest in creating incentives to replace fossil diesel with renewable diesel. DEQ should add stationary generators as an opt-in use of renewable diesel to help decarbonize this growing source of reliable power. Similar to rail applications, nearby communities would see reduced air emissions if renewable diesel was used in these generators.

We appreciate your consideration.

Oscar Garcia
Senior Regulatory Affairs Manager
Neste US, Inc.

POET
900 7th St. NW, Suite 820
Washington, D.C. 20001
Ph: (605) 965-2200
poet.com

July 31, 2024

Mr. Bill Peters
Oregon Department of Environmental Quality
700 NE Multonomah Street, Suite 600
Portland, OR 97232

Submitted electronically via email to: CFP.2024@deq.oregon.gov.

RE: POET COMMENTS ON DEQ'S CLEAN FUEL PROGRAM 2024 RULEMAKING

Dear Mr. Peters:

POET appreciates the continued opportunity to participate in Oregon's Department of Environmental Quality's ("DEQ") Clean Fuel Program 2024 Rulemaking and supports DEQ's dedication to decarbonizing the transportation sector. POET is also supportive of DEQ's efforts to update the OR-GREET model, as discussed during the July 9, 2024 workshop.

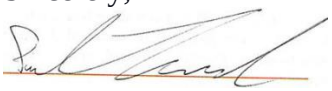
During the July 9 workshop, DEQ re-iterated its goal to update the OR-GREET model in connection with the California Air Resource's Board ("CARB") updates to the CA-GREET model. In relation to this, DEQ noted its goal for the OR-GREET4.0 model to be used in 2025 annual reports and for DEQ to accept recertification of pathways using a 3.0 model through March 2025. It is unlikely at this point that CARB will have the CA-GREET4.0 model finalized by the end of 2024. As it stands, CARB will not have its next Low Carbon Fuel Standard (LCFS) public hearing until November 8, 2024, and it does not anticipate having LCFS amendments in place until sometime in 2025 at the earliest. *See* https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard. This timeline does not align with DEQ's proposal. As such, POET urges DEQ to delay setting a timeline for implementing the OR-GREET4.0 model until there is further clarity on the timeline for CARB's rulemaking process.

POET also encourages DEQ to maximize carbon intensity reduction opportunities by considering updates to the OR-GREET model consistent with the Biden Administration's proposal to promote agricultural sustainability. As part of its recent Inflation Reduction Act § 40B sustainable aviation fuel ("SAF") Guidance, the Treasury Department adopted a GREET model that incentivizes SAF production from corn ethanol. *See* U.S. Department of Treasury, Notice 2024-37, § 40B SAF Credit Guidance (April 30, 2024) (§ 40B Guidance) *available at* https://www.irs.gov/pub/irs-drop/n-24-37.pdf. Treasury's guidance recognizes that no-till farming, planting cover crops, and applying enhanced efficiency nitrogen fertilizer are all climate smart agricultural practices that help reduce carbon intensity (CI) for crop-based feedstocks such as corn. *Id.* DEQ should adopt a similar approach, incentivizing the decarbonization of bioethanol as a feedstock for SAF and promoting sustainability on American farms.

CONCLUSION

POET appreciates the opportunity to comment and looks forward to continuing its work with DEQ to make the Clean Fuel Program a continued success for Oregon. If you have any questions, please contact me at Paul.Townsend@POET.com or (605) 756-5612.

Sincerely,



Paul W. Townsend
Associate Regulatory Counsel

RIVIAN

July 31, 2024

Bill Peters
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232

SUBMITTED ELECTRONICALLY TO: CFP.2024@deq.oregon.gov

Re: Comments on the July 9 Workshop for the Clean Fuels Program 2024 Rulemaking

To Bill Peters,

Following the July 9 workshop for the Clean Fuels Program ("CFP") 2024 rulemaking, Rivian Automotive, LLC, ("Rivian") respectfully submits the following comments.

Rivian has long championed Oregon's CFP and we appreciate the Department of Environmental Quality's ("DEQ's") leadership in developing and maintaining the policy. We are a participant in the CFP primarily through our charging network, but our customers also generate value for the program through residential charging of Rivian electric vehicles ("EVs"). As a stakeholder in and supporter of the CFP, we have engaged in DEQ's CFP rulemakings for many years and have advocated for fundamentally new approaches to certain aspects of the program's design. Most prominently, we continue to believe that providing automakers with an opportunity to participate in residential credit generation would have several important benefits for the CFP and significantly improve on the status quo. We recognize that the design of the residential credit pathway is not in the scope of this rulemaking but look forward to continuing to advocate for new approaches that improve the accuracy of the CFP and reward EV drivers.

More clearly within the scope of the current rulemaking, however, is the energy efficiency ratio ("EER") used for light-duty EVs. DEQ should revise the EER as part of its update to the OR-GREET model.

DEQ should also reconsider the current proposal to require third-party verification of certain non-residential electricity credit generation. Third-party verification is arguably unnecessary and would only impose additional costs on electricity credit generation at a time of rapidly falling credit prices in the Oregon market. At a minimum, we find that the verification procedures should be streamlined to reflect important feasibility concerns with respect to verifying electricity use.

About Rivian

Founded in 2009, Rivian is an independent U.S. company headquartered in California. With over 16,000 employees across the globe, Rivian's mission is to Keep the World Adventurous Forever. Rivian's focus is the design, development, manufacture, and distribution of all-electric adventure vehicles, specifically pickups, sport utility vehicles ("SUVs"), and commercial vans. Key to the success of our mission, these vehicles will displace some of the most polluting conventional vehicles on the road today.

Rivian brought the first modern electric pickup to market in 2021 when we launched the R1T from our manufacturing facility in Normal, Illinois, followed shortly thereafter by the R1S SUV and the EDV commercial van for Amazon. The R1T and R1S—both medium-duty passenger vehicles ("MDPVs")—provide all-electric options in segments where added utility is a necessity. The R1T has an EPA-certified range of up to 410 miles. The R1S is certified at up to 400 miles. The truck also features 11,000lbs of towing capacity, while the R1S is a seven-passenger full-sized SUV. Both are well-equipped for off-roading in a range of climates. Separately, our Class 2b and 3 commercial vans eliminate tailpipe emissions from last-mile delivery. Rivian is committed to producing 100,000 vans for our launch customer, Amazon, with more than 15,000 already in service in 800+ U.S. cities. The van is now also available for purchase by other fleet customers in addition to Amazon. Beyond our vehicle lineup, Rivian is also building a network of DC fast chargers across the country known as the Rivian Adventure Network ("RAN"). Eight RAN sites are already up and running in Oregon alone.

Revise the EER for Light-Duty EVs Alongside Updates to OR-GREET

DEQ should use this rulemaking to revise the EER used for light-duty EVs in the CFP. This is a relatively minor change in terms of administrative and rulemaking complexity but one with important and significant benefits for the integrity of the CFP and electricity credit generation. Rivian believes revising the EER is consistent with the spirit and nature of the proposed technical updates to the OR-GREET model and would not represent a dramatic increase or change in the rulemaking's scope.

The current light-duty EER value of 3.4 stems from a determination originally made by CARB in the 2011 rulemaking for the California LCFS—and is thus now more than a decade old and

unrepresentative of the contemporary EV fleet.[1] Manufacturers have made substantial improvements to EV efficiency in the years since the California LCFS was first developed and continuing to use an outdated EER systematically undervalues those efficiency improvements, the real-world displacement of fossil fuels achieved by EVs, and the true role EVs play in decarbonizing the transportation fuel pool in support of the CFP's objectives. Examples of revised EERs exist in other clean fuels programs and point the way to a more appropriate figure for use in the CFP. Canada's regulation, for instance, specifies an EER of 4.1 for light-duty vehicles.[2] Rivian would be pleased to discuss this issue further with staff and we strongly encourage DEQ to incorporate it into the rulemaking.

Reconsider Proposals for Third-Party Verification of Non-Residential Charging

Rivian appreciates the intent of DEQ's proposal to require non-residential charging credit claims to undergo third-party verification. However, Rivian finds that a third-party verification requirement might be unnecessary and, at minimum, risks introducing costly and potentially infeasible obligations unless thoughtfully designed and implemented. DEQ should be particularly sensitive to rule changes that raise costs at a time when the economics of electricity credit generation are increasingly strained by rapidly falling credit prices.[3]

- **The Weights and Measures Division of the Oregon Department of Agriculture is the appropriate body for regulating the accuracy of commercial EV charging infrastructure.** Insofar as validating the accuracy of EV chargers is at issue, a third-party verification requirement under the CFP would be duplicative, introducing unnecessary costs. Rivian recommends that DEQ reconsider whether a verification requirement is necessary and appropriate and the extent to which Weights and Measures regulations could achieve the same objectives within the Department of Agriculture's existing authority.

---

[1] California Air Resources Board, Appendix A: Proposed Regulation Order, October 26, 2011, available at www.arb.ca.gov/sites/default/files/barcu/regact/2011/lcfs2011/lcfsappa.pdf.

[2] Environment and Climate Change Canada, *Clean Fuel Regulations: Specifications for Fuel LCA Model CI Calculations, Version 2.0*, January 2023, p. 85, available at www.data-donnees.az.ec.gc.ca/data/regulatee/climateoutreach/carbon-intensity-calculations-for-the-clean-fuel-regulations/en/Resources/?lang=en.

[3] https://www.oregon.gov/deq/ghgp/cfp/Pages/Monthly-Data.aspx

- **Third-party verification requirements for electricity, if any, should take a pragmatic approach and reflect key feasibility concerns.** If DEQ nonetheless elects to finalize verification requirements for nonresidential charging activity, Rivian urges careful consideration of the real-world implications of third-party verification requirements and a final rule that adjusts accordingly. In our view, this means providing additional opportunities for certain entities to rely on less intensive verification and exempting EV charging stations from universal site visit requirements. Requiring site visits to every charging station would be costly and impractical. Instead, Rivian recommends that DEQ require verifiers to visit only the reporting entity's central recordkeeping location and a reasonable sample of field sites. **We strongly support exempting residential EV charging entirely and establishing a threshold for inclusion in the verification requirements.** The proposed threshold of 6,000 credits and deficits per year seems reasonable.

Conclusion

Rivian welcomes this opportunity to engage with DEQ on its rulemaking to amend the CFP. We strongly support the program and welcome the opportunity to strengthen it further. We recommend that DEQ use this opportunity to revise the light-duty EV EER and reconsider the need and details of its proposal to require third-party verification non-residential charging.

Please contact me with any questions. Rivian would be pleased to discuss any of the issues raised in this letter with the agency. Thanks again to DEQ for this opportunity to provide feedback. We look forward to continued discussion with you and all stakeholders during the rulemaking process.

Sincerely,

Tom Van Heeke
Senior Policy Advisor
Rivian Automotive, LLC
tvanheeke@rivian.com | 641-888-0035

RPMG™
1157 Valley Park Drive, Ste. 100
Shakopee, MN 55379

July 31, 2024

Bill Peters, Interim CFP Manager
Oregon Department of Environmental Quality

Re: OR-GREET 4.0 Model

Submitted electronically at CFP.2024@deq.oregon.gov.

Dear Bill,

RPMG Inc. (RPMG) is a biofuel marketing company representing our owner and marketing partner ethanol facilities located throughout the Midwest. Our member facilities provide both ethanol and distillers corn oil (DCO) as essential inputs to Oregon's clean-fuels market in substantial quantities. Since the Program's inception, RPMG has supported Oregon's clean transportation fuel policy, and worked diligently with DEQ to improve the administration of the Program.

Our member facilities are continually investing in lower-carbon technologies, innovative production methodologies, and ways to reduce greenhouse gas emissions to the atmosphere. These technologies include corn kernel fiber ethanol, wholistic facility efficiency upgrades, waste heat recovery, lower-carbon agricultural practices and Carbon Capture and Storage (CCS).

RPMG appreciates the opportunity to comment on the release of the new OR-GREET 4.0 model. We understand the OR-GREET 'update' is the compilation of several embedded model updates, including OPGEE, EMFAC, and eGRID. Similarly, to working with CARB on their CA-GREET update, RPMG wants to ensure the documentation, assumptions and model inputs accurately reflect the reality associated with domestic starch and fiber ethanol production. Outlined below are suggestions to the OR-GREET model to ensure model inputs are accurate and representative of the on-the-ground facts that are the basis for CFP pathways.

Tier 1 Fiber Ethanol Calculator:

In reviewing the proposed OR-GREET 4.0 Starch and Fiber Ethanol T1 Calculator, RPMG encourages DEQ to refine or provide further explanation of the following sections of the calculator:

1. A summary line should be added to the Site-Specific Input tab to aid in user reconciliation of aggregated monthly entries and Verifier reference in summarization detail.
2. Provide documentation and rationale for the new Barge emission factor, which has doubled from the previous version of OR-GREET. On the previous model, the barge EF was 0.07 and in the proposed model the EF jumped to 0.140.
3. It is recommended to remove "US Average" as an option to select under 3.2 Grid Electricity Region. Removing the "US Average" option will prevent pathway applicants from submitting

incorrect data, and because the CA-GREET simplified calculator does not include this drop-down option it will further prevent any issues for applicants recertifying a CA pathway application in OR.

4. RPMG could not identify where fiber ethanol enzyme normalization was incorporated into the modeling. Will enzyme normalization be factored into the OR-GREET 4.0 model, or will the enzyme normalization have a standalone document?
5. The OR-GREET 4.0 SFE T1 Calculator applies an emission factor for "Evaporative Emissions." It is not clearly identified in the material what this emission factor represents. It is presumed the emission factor is meant to consider emissions of Volatile Organic Compound (VOCs) in the production profile of ethanol plants. However, all U.S. domestic ethanol production facilities are obliged to implement and comply with Leak Detection and Repair (LDAR) mandates overseen by USEPA. Adherence to LDAR makes the presence of this additional assumed emission factor unnecessary and results in an arbitrary inflation of the CI score result. This emission factor should be removed from the OR-GREET 4.0 SFE T1 Calculator.
6. This iteration of the OR-GREET 4.0 T1 calculator should consider secondary and alternative energy directed to and allocated for co-product processing energy. For example, if an alternative energy source is consumed to operate only the drum dryer to bake Dried Distiller's Grain with Soluble, the entry field for co-products should be broadened to capture this alternative energy source emission factor for the relevant allocated proportion and not simply default to the assumed primary process energy emission factor as the only option for calculation.
7. We noted the Emission Factor for Fiber Enzymes has been modified transitioning from 1,207 grams CO2e per pound in OR-GREET 3.0 to 525 grams CO2e per pound in OR-GREET 4.0. When previously proposed to CARB staff for an explanation, they explained this change is attributable to assuming a 50% moisture content of Enzymes received and used, and that the EF now compensates for this rate of moisture inclusion. RPMG recommends documenting the rational and basis for this change.
8. The default value option for feedstock transport should be expanded to include more regions of biofuel production in addition to the present 9 state region identified. Identifying and producing records for harvest sites and collection sites is labor intensive. Without the option of a default value, certain applicants may choose simply not to participate due to this impediment. At the very least, the demonstration of feedstock transport mileage where a default value is not an option should be limited to a one-time Validation and not an on-going data collection exercise

In addition to the comments and suggestions noted above, RPMG addressed another comment to CARB during their rulemaking and believe it is worth mentioning to OR DEQ. Previously, RPMG proposed all CA-GREET 3.0 Standard Methods and CARB designated Protocols, used by pathway holders since the last amended regulation effective for 2019, be provided to the public in an accessible online library or website. This will help all applicants to be able to access the same information and provide awareness of existing Standard Methods and Protocols developed after the adoption and issuance of T1 Calculator materials.

Instruction Manual:

RPMG notes that it can be challenging to review the proposed GREET modeling without an instruction manual. RPMG suggests DEQ release an instruction manual prior to the release of the final OR-GREET 4.0. This will ensure pathway applicants have a comprehensive resource with clear understanding of the model inputs.

Verification Participation:

RPMG recommends allowing verifiers to gather Oregon calculators from the AFP portal for California recertified pathways. Allowing verifiers to review all reports and calculators for recertified pathways verified for the California LCFS will ensure the reporting is true and accurate. This process will confirm facilities are accurately reporting numbers and generating eligible credits for pathways recertified in Oregon.

In Closing

RPMG looks forward to continuing these conversations and is available to clarify any suggestion provided in this letter. Please contact me with any questions or comments at (952) 465-3255 or jnowicki@rpmgllc.com

Thank you,

Jesse Nowicki
Regulatory and Compliance Specialist
RPMG Inc.

WSPA
Antonio Machado
Senior Manager, Northwest Regulatory Affairs and Fuels

July 31, 2024

Sent via e-mail to: CFP.2024@deq.state.or.us

Mr. Bill Peters
Oregon Clean Fuels Program Manager
Oregon Department of Environmental Quality
700 NE Multnomah Street
Portland, OR 97232-4100

Re: WSPA Comments; DEQ 2024 CFP GREET 4.0 Workshop

Dear Bill:

Western States Petroleum Association (WSPA) appreciates the opportunity to provide the Oregon Department of Environmental Quality (DEQ) with our feedback from the Clean Fuels Program (CFP) 2024 Oregon GREET (OR-GREET) 4.0 Workshop, held on July 9, 2024. WSPA is a non-profit trade association that represents companies that explore for, produce, refine, transport and market petroleum, petroleum products,natural gas, and other energy supplies in Oregon and four other western states.

OR-GREET 4.0 Model Updates

As noted in a previous WSPA comment letter[1], WSPA suggests that DEQ continue to allow the use of CA-GREET as an alternative to the OR-GREET model. Since both models use the same emission factors, this approach would avoid duplication of inputs and minimize potential errors for entities that already use CA-GREET.

OR-GREET Model Implementation Timeline

Also, as noted in the previous WSPA comment letter noted above, WSPA requests that DEQ specify in the rule language that CI exceedances that result only from the transition to OR-GREET 4.0 are exempt from penalty or enforcement. Further, WSPA urges DEQ to allow the use of certified fuel pathway codes (FPC) under CA-GREET 3.0 or OR-GREET 3.0 for at least 2 quarters in concurrence with new FPC certified under CA-GREET 4.0 or OR-GREET 4.0 to enable the completion of transactions for fuel in inventory that was certified under the CA-GREET 3.0 or OR-GREET 3.0.

Crude Slate

WSPA requests that DEQ clarify that: (1) the crude oil slate does represent a baseline year and (2) the year to be used for the baseline. Furthermore, WSPA requests that DEQ confirm that the crude slate has not been modified since the original adoption of the CFP regulation and only the carbon intensities of the various crude oil were updated with the latest version of the OPGEE model.

Oregon Grid Mix

It was unclear to WSPA during the Workshop as to how the coal fraction of the grid mix is determined by DEQ, and how the shutdown of the Boardman coal fired power plant has impacted the overall

[1] Western States Petroleum Association. "WSPA Comments - DEQ 2024 CFP Rulemaking Workshop #1", February 16, 2024.

grid mix in Oregon. WSPA requests that DEQ provide further information on these aspects of the Oregon grid mix. We also ask that DEQ publish the emission factor used for the electricity produced from “unspecified sources”.

Simplified Calculators

WSPA requests that DEQ provide the rationale (justification) for applying the N_2O emission factor for petroleum diesel to biodiesel/renewable diesel.

Substitute Fuel Pathways Codes

WSPA requests that DEQ provide the rationale to increase the temporary CI scores of alternative jet fuel and renewable naphtha. WSPA asks for confirmation that temporary CI scores for renewable diesel and biodiesel will remain unchanged at 45 and 65 gCO2e/MJ.

WSPA appreciates the opportunity to provide comments on this important proposed regulation. We encourage you to reach out to WSPA for any clarification on these comments. Please do not hesitate to contact me directly at (360) 594-1415 or via email at amachado@wspa.org.

Sincerely,