Growth Energy™
Expanding America's Bioeconomy

April 6, 2026

Secretary Scott Bessent
Department of the Treasury
1500 Pennsylvania Avenue, NW
Washington, DC 20220

RE: Growth Energy Comments on the 45Z Clean Fuel Production Credit Proposed Regulations

Dear Secretary Bessent:

Thank you for the opportunity to comment on the Internal Revenue Service's (IRS) proposed rulemaking to implement the Section 45Z Clean Fuel Production Credit (REG-121244-23) ("Proposed Rule")[1]. We applaud the progress IRS has made in advancing this robust regulatory package and supporting the efficient, effective, and science-based implementation of the Section 45Z Clean Fuel Production Credit ("45Z Credit").

Growth Energy is the nation's largest association of biofuel producers, representing 97 U.S. plants that each year produce more than 9.5 billion gallons of low-carbon, renewable fuel; 131 businesses associated with the production process; and tens of thousands of biofuel supporters around the country. Our members are critical to the supply of biofuel in the United States and have substantial interests in sound implementation of the 45Z Credit. Our industry is poised to assist the administration's energy goals by providing low-cost, innovative, and American-made fuel as we remain committed to helping our country diversify its energy portfolio and provide consumers with better and more affordable choices at the fuel pump.

I. The 45Z Credit is Critical to the Ethanol Industry, the U.S. Agricultural Economy, and U.S. Energy Security.

For over two decades, the U.S. ethanol industry has played a substantial role in the U.S. economy and energy security. In 2025, U.S. ethanol production hit record highs of over 16.49 billion gallons, 14.34 billion of which were blended into motor gasoline for U.S. consumption. [2] These gallons displace petroleum gallons from the transportation fuel supply, thereby contributing to U.S. oil reserves in times of surplus and reducing dependence on foreign oil in times of shortage. As the Department of Energy ("DOE") acknowledges, ethanol "strengthens national security by increasing resilience to natural disasters and fuel supply disruptions."[3] In addition, U.S. ethanol reduces consumer costs at the pump by 77 cents/gallon on average, for a

[1] 91 Fed. Reg. 5,160 (Feb. 4, 2026).
[2] EIA, *U.S. Oxygenate Plant Production of Fuel Ethanol*, (Feb. 28, 2025) https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=m_epooxe_yop_nus_1&f=a
[3] https://afdc.energy.gov/fuels/ethanol-benefits

total savings of $95.1 billion per year for U.S. consumers.[4] U.S. Department of Agriculture ("USDA") analysis also shows that ethanol blending reduces price volatility, as a 10 cent/gallon increase in crude oil prices would only result in increases of 2.8 cents/gallon over the short term or 4.2 cents/gallon over the long term for E10[5] at the pump.[6]

Further, over 2 billion surplus ethanol gallons are sent to export markets including Canada, Mexico, the United Kingdom, and the European Union. These energy exports strengthen national security and diplomacy positions while simultaneously injecting wealth into the U.S. economy.

In total, the ethanol industry contributed over $50 billion to U.S. GDP in 2025, generated over $28 billion in employment-related income for workers, and supported more than 316,000 jobs in 2025.[7] The industry also provided more than $10 billion in tax revenues to federal and state governments.[8] The majority of these benefits arise in the agricultural sector across America's heartland.[9] A strong and stable agricultural sector sets the foundation for a strong and stable American economy by reducing costs of key commodities across extensive supply chains.[10]

The 45Z Credit plays a vital role in incentivizing innovation in the U.S. ethanol industry, and Growth Energy applauds the IRS on issuing this Proposed Rule. In this letter, we identify several key recommendations for the agency to further improve upon this rule. We encourage the IRS to swiftly finalize the proposed regulations consistent with the adjustments suggested below.

II. The Proposed Rule Takes Meaningful Steps to Further Recognition of Farm Practices But Should Provide Greater Certainty in the Near Term.

The U.S. has the most advanced agricultural sector in the world, with farmers that are constantly innovating and developing new techniques and practices to increase efficiency and reduce emissions. Growth Energy thanks the IRS and its partner agencies for the steps it has taken to recognize American innovation in the fields through the development of a 45ZCF FD-CIC module, to be used as an input to the 45ZCF-GREET model. However, we urge the IRS to

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[4] Zilberman, et. al., *Impact of ethanol on gasoline prices in the U.S.: New evidence* (2023) (evaluating price impacts across 2019-2022).
[5] E10 is composed of up to 10% ethanol and 90% gasoline, and is the most common fuel blend sold in the U.S. today. *See* https://afdc.energy.gov/fuels/ethanol-blends
[6] USDA Economic Research Service, *Pricing of Ethanol Blends at the Pump Differs in the Short Term Compared With the Long Term* (Dec. 19, 2024) https://www.ers.usda.gov/amber-waves/2024/december/pricing-of-ethanol-blends-at-the-pump-differs-in-the-short-term-compared-with-the-long-term.
[7] Renewable Fuels Association, *The Contribution of the Ethanol Industry to the U.S. Economy* (2025) https://ethanolrfa.org/file/3046/Economic%20Contribution%20of%20the%20US%20Ethanol%20Industry%20in%202025.pdf
[8] *Id.*
[9] *Id.*
[10] U.S. Chamber of Commerce, *How Agriculture Supports the American Economy and Main Street Businesses* (Aug. 21, 2024) https://www.uschamber.com/security/agriculture-regulations/how-agriculture-supports-the-american-economy-and-main-street-businesses

adopt reasonable interim measures to allow taxpayers to access emissions reductions from farm practices swiftly and without unnecessary administrative delays.

The Proposed Rule sets forth a multi-step, multi-agency process for implementing farm practices, in which USDA would first finalize the USDA FD-CIC module, *then* DOE would adopt a "45Z-specific" version of that FD-CIC module ("45ZCF FD-CIC") within the 45ZCF-GREET model, *then* IRS would publish "additional guidance" enabling taxpayers to use the 45ZCF FD-CIC module.[11] This multilayered approach would delay taxpayers' access to farm practice incentives. As the IRS acknowledges, the USDA FD-CIC module is itself "undergoing testing, peer review, and public comment" which will ensure that the final version of USDA FD-CIC is robust and highly credible upon publication. If 45ZCF FD-CIC remains unavailable at the time the IRS finalizes this Proposed Rule, IRS should allow taxpayers to utilize the final USDA FD-CIC module to calculate credit amounts until such time that 45ZCF FD-CIC is finalized.

Moreover, USDA has already published final technical guidelines for quantifying, reporting, and verifying emissions reductions from farm practices.[12] These guidelines were adopted through a public notice and comment process and were specifically designed to "allow[] for the differentiation and quantification of carbon intensities associated with the production of farm crops used as biofuel feedstocks, through USDA FD-CIC, upon its finalization."[13] In finalizing the Proposed Rule, the IRS should incorporate these USDA technical guidelines by reference so that taxpayers may begin utilizing USDA FD-CIC, and later 45ZCF FD-CIC, immediately upon the finalization of those modules without any further action needed from the IRS.

Lastly, we emphasize that the four practices referenced in the Proposed Rule—no till, reduced till, cover crops, and nutrient management[14]—is far from an exhaustive list of farm practices that can be reliably quantified today. The 45ZCF FD-CIC module should include at least the full scope of practices included in USDA FD-CIC, and both modules should be regularly reevaluated for expansion into new farm practices as farmers continue to innovate. In particular, the IRS should coordinate with USDA to include emissions reductions from biological solutions (including biostimulants, biofertilizers, and biopesticides) that enhance soil health, improve nutrient uptake, and increase crop yields. Often, best farm practices will vary across individual farms due to the multitude of factors that impact crop production. It is therefore critical that farmers have flexibility to apply those farm practices that work best for their unique operations, leading to greater incentive and participation.

III. IRS Should Coordinate with DOE and Other Partner Agencies to Swiftly Release Targeted Updates to the 45ZCF-GREET Model.

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[11] Proposed Rule at 5,172.
[12] 7 C.F.R. 2100.
[13] 90 Fed. Reg. 5,497 (Jan. 17, 2025)
[14] Proposed Rule at 5,172.

Though the 45ZCF-GREET model remains the best available science in lifecycle analysis modeling, we encourage the IRS and its partners at the DOE to release certain targeted updates to the model and the accompanying User Manual to further improve the current model.

a. The 45ZCF-GREET User Manual should clarify that taxpayers may calculate emissions rates without inclusion of indirect land use change ("iLUC"), though the 45ZCF-GREET model may still include iLUC as a separate line item.

IRS should work efficiently with the DOE to adjust the User Manual to clarify the process for excluding emissions estimates attributed to indirect land use change ("iLUC") from 45Z Credit calculations. As Growth Energy and other commenters have noted in the past, assessments of iLUC emissions in lifecycle assessments are inherently highly speculative and often fraught with incorrect assumptions. Congress appropriately addressed this issue through amendments to the 45Z Credit in the One Big Beautiful Act ("OBBA"), clarifying that emissions rates "shall be adjusted as necessary to exclude any emissions attributed to indirect land use change" for all fuel produced after December 31, 2025.[15]

The most straightforward and efficient method to implement Congress' directive is to adjust the User Manual to clarify that taxpayers may simply exclude the values associated with iLUC emissions when calculating overall CI scores. The 45ZCF-GREET model should continue in the near-term to calculate iLUC separately, which may remain necessary for fuels produced prior to December 31, 2025. In addition, while the 45ZCF-GREET model's iLUC calculations still represent an overestimate compared to real world impacts, the model remains the product of rigorous, peer-reviewed technical analysis from multiple federal agencies. Preservation of this work would provide a useful data point which other programs currently relying upon outdated iLUC modeling, such as EPA's Renewable Fuel Standard and various state clean fuels standards, could and should draw upon in updating their methodologies.

Because the 45ZCF-GREET model helpfully breaks out the emissions calculation associated with iLUC as a separate line item, it can readily be deducted from the overall emissions calculation. This structure is also most consistent with the text of Congress' OBBA amendments, which describe the exclusion of iLUC as an "adjustment" made to the emissions rate.[16] Clarifying in the User Manual that taxpayers may exclude iLUC in this manner would provide much-needed certainty in the near-term for determining 45Z Credit eligibility.

b. The User Manual should allow producers to fully account for CCUS-related emissions reductions verified using a Section 45Q lifecycle analysis.

Ethanol producers are employing innovative carbon capture, utilization, and storage ("CCUS") technologies across the industry that create both value and efficiencies in the use of carbon dioxide for food and beverage products while reducing emissions. Approximately 25% of the ethanol industry already captures carbon dioxide, and a growing number of facilities plan

[15] 16 U.S.C. § 45Z(b)(1)(B)(iv); OBBA § 70521(c)(1).
[16] 16 U.S.C. § 45Z(b)(1)(B)(iv).

to install the technology in the near future. Carbon dioxide captured from ethanol facilities is used in a wide and growing variety of applications.[17]

As the final rule is developed, we encourage the IRS and DOE to ensure that the 45Z framework accurately reflects the full range of emissions-reducing activities being undertaken by ethanol producers. Regulatory approaches that account for the breadth of verified, real-world emissions reductions achieved across the industry will support the program's objectives and encourage continued investment in clean fuel production.

c. The 45V rules for EACs for renewable electricity address concerns not applicable in the 45Z context and should not apply.

An updated 45ZCF-GREET model should not fully mimic the rules established under section 45V for energy attribute certificates ("EACs," more commonly referred to as Renewable Energy Certificates ("RECs")) for renewable electricity,[18] because, unlike in hydrogen production, induced grid emissions are not a "significant" indirect emission within the meaning of Clean Air Act § 211(o)(1)(H) and 26 U.S.C. § 45Z(b)(1)(B) for clean fuel production.

The 45V rules were adopted specifically for the electrolytic hydrogen context which requires substantial electricity resources. Notably, the "three pillars" of "deliverability,"[19] "temporal matching,"[20] and "incrementality"[21] were included not to address direct emissions from the generation of electricity actually used in the production process, but rather to address indirect "induced" emissions from a concern that electricity demand from hydrogen projects would be so substantial that it would materially alter the mix of electricity generation on the grid as renewable resources are diverted in bulk towards hydrogen production.[22]

In contrast, the modest quantities of electricity used in biofuel production bears no semblance to the quantities of electricity used in electrolytic hydrogen production. As such, the risk that the carbon intensity reductions claimed by biofuels producers through renewable RECs may be offset by induced indirect emissions from the electricity grid is therefore insignificant, or even non-existent.

Section 45Z's definition of "lifecycle greenhouse gas emissions"—incorporating the same definition from Clean Air Act § 211(o)(1)(H)—includes only those indirect emissions which are "significant."[23] Neither Treasury nor DOE nor EPA has established that biofuels producers' use of RECs has *any* indirect emissions impacts, and certainly none that would rise to the level of "significant."

As the 45V rules for RECs have no statutory basis as applied to 45Z, have no material emissions benefit, and would be a burdensome restriction on biofuels producers' ability to deploy

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[17] Growth Energy, Putting Carbon to Work: Biorefineries' Critical Contributions to Net-Zero (June 2022) https://growthenergy.org/wp-content/uploads/2022/06/GROW-22019-Issue-Brief-Carbon-Capture-2022-06-22-R8.pdf.
[18] Proposed Rule at 5,172.
[19] *I.e.*, the electricity generation is in the same region as the biofuel production.
[20] *I.e.*, the timing of the generation corresponds to electricity use in the biofuel production process.
[21] *I.e.*, the generation is new and additive, rather than displacing existing capacity on the grid.
[22] *Credit for Production of Clean Hydrogen and Energy Credit*, 90 Fed. Reg. 2,224, 2,253-57 (Jan. 10, 2025).
[23] 26 U.S.C. § 45Z(b)(1)(B)(i); 42 U.S.C. § 7545(o)(1)(H).

cost-effective carbon-intensity reduction strategies, the IRS should not finalize identical rules for the 45Z Credit. At a minimum, Treasury should clarify that annual matching of RECs to clean fuel production is appropriate under 45Z for the full duration of the credit, and that hourly matching requirements established for REC use in hydrogen production after 2029 do not apply to clean fuel production under 45Z.

d. An updated 45ZCF-GREET model should include additional ethanol feedstocks and process emissions reductions strategies.

Growth Energy urges the IRS, in coordination with the DOE, to expand the ethanol pathways covered by the 45ZCF-GREET model. Growth Energy members today are producing low-carbon renewable fuels from wheat slurry, sorghum oil, and proso millet, demonstrating that each of these pathways are sufficiently developed to be included in the 45ZCF-GREET emissions rate table. IRS and DOE should also adopt a generic U.S. grain and starch pathway for ethanol produced in a fermentation process as a catch-all for feedstocks that are not otherwise specified in the rate table. Such a category would help 45ZCF-GREET stay up to date as producers increasingly innovate with new feedstocks. Inclusion of each of these feedstock classifications in the rate table is especially critical due to delay concerns with the proposed PER petition process, as discussed further below.

Further, 45ZCF-GREET should be expanded to recognize the use of additional process energies. For example, low-carbon natural gas is produced utilizing CCUS at the upstream point of production to significantly reduce the lifecycle emissions of the natural gas product.[24] As with renewable natural gas ("RNG"), low-carbon natural gas provides a lower-emissions alternative to the use of conventional natural gas at biorefineries, and thereby reduces the emissions rate of fuel produced at the biorefinery. Other examples of low emissions process energy include waste wood and landfill gas. An updated 45ZCF-GREET model should include options to designate these sources as process energy.

IV. Greater Flexibility and Administrative Efficiency Is Needed in the Provisional Emissions Rate ("PER") Process.

Producers of transportation fuels for which an emissions rate has not been established under the 45ZCF-GREET model may file a petition to establish a provisional emissions rate ("PER").[25] This PER petition process is intended to incentivize producers and facilities that can demonstrate, as a technical matter, lower emissions rates than those included in the categorical rate table. It is also intended to be a swift and efficient process to provide certainty and investability to innovative producers reliant upon the 45Z Credit. While Growth Energy thanks the IRS for addressing the urgent need for additional clarity on the PER petition process in the present rulemaking, the approach set forth in the Proposed Rule is unnecessarily burdensome and undercuts both of these core purposes of the PER mechanism.

a. The PER petition process should allow producers of fuels included on the emissions rate table and specific efficient facilities to demonstrate process efficiencies that reduce emissions rates.

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[24] Gunvor Group, *The Case for Recognizing Low-Carbon Natural Gas as a Process Input to 45Z Transportation Fuel Production.*

[25] 26 U.S.C. § 45Z(b)(1)(D).

Contrary to the 45Z Credit's statutory purposes to incentivize innovation and emissions reductions, the Proposed Rule asserts that the DOE and IRS will deny any "PER petition for a type and category of fuel included in the applicable emissions rate table" and will also deny any "PER petition based on a facility rather than a type or category of fuel."[26] The Proposed Rule further defines both "type of transportation fuel" and "category of transportation" broadly, such that "type" refers to "a particular kind of transportation fuel" and "category" refers to "the unique primary feedstock and pathway (also known as production process) used to produce a type of transportation fuel."[27] Thus, IRS asserts that "fermentation of U.S. corn starch ethanol" is a single "type and category" of transportation fuel.[28]

Restricting the PER petition process in this way will prevent efficient producers from accessing the intended incentives for reducing the carbon intensity of their fuel. For example, some Growth Energy members deploy unique technologies in processing corn starch ethanol that are not currently encompassed in 45ZCF-GREET to lower their ethanol's carbon intensity. Under the Proposed Rule, the PER would be unavailable for them to more accurately calculate their 45Z Credit eligibility because the U.S. corn-starch ethanol "type and category" is already encompassed within existing emissions rate tables. Congress included a PER process to spur investments in efficiency improvements, including by experimenting with innovative emissions reduction technologies and practices at specific facilities; the Proposed Rule would do the exact opposite.

The most straightforward adjustment to enable the PER petition process to properly incentivize efficient producers is to remove the restrictions on types and categories included in the rate table and on specific facilities. Alternatively, IRS could adopt narrower definitions for "type" and "category." As Growth Energy has previously explained, a "category of transportation fuel" in the context of the 45Z Credit is best read to refer not only to the feedstock (*e.g.* corn starch) and general production process (*e.g.* fermentation), but rather to each distinct combination of factors that impact carbon intensity, including facility-specific process technologies and agricultural practices.[29]

b. IRS should remove unnecessary and time-consuming steps from the PER petition process.

The PER petition process should be nimble, predictable, and efficient to provide producers with certainty early in the development process. Instead, under the Proposed Rule's framework, producers must obtain approvals from *both* the DOE (to establish an emissions value ("EV")) and the IRS (to approve the PER petition) before receiving a PER.[30] Growth Energy encourages IRS to finalize the § 1.45Z-2(f)(5) deemed accepted provision; however, it remains unclear how a DOE-dependent PER petition process would be any quicker or less onerous than establishing a final emissions rate through DOE updates to the 45ZCF-GREET model. Indeed,

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[26] Proposed Rule at 5,173.
[27] Proposed Rule at 5,194.
[28] *Id.*
[29] Growth Energy Comments on IRS Notice 2022-58 (December 2, 2022). Growth Energy intends to incorporate these prior comments to the present docket by reference herein.
[30] Proposed Rule at 5,173.; proposed § 1.45Z-2(f)(3-4).

to date DOE has not issued guidance addressing the 45Z Emissions Value Request Process, and has indicated that it "will not issue emissions values until after such guidance is published."[31]

We urge IRS to streamline the PER petition process by allowing for third-party verification as an alternative to a DOE-calculated EV. The Proposed Rule already incorporates third-party verification in its certification process for SAF emissions rates,[32] as well as the emissions rate safe harbor for non-SAF fuels.[33] Numerous other regulatory programs also rely on third-party verification to reduce agency burden and delay, including the California LCFS Standard[34] and ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)[35] for determining the lifecycle emissions of fuel pathways, and the EPA Renewable Fuels Standard for validation of certain other aspects of registering and reporting renewable fuel production. [36] IRS should similarly allow producers to rely upon certifications obtained in substantially the same form and manner as those described in proposed § 1.45Z-5 to establish an EV for use in the PER petition.

Moreover, IRS should allow producers to initiate the PER petition process at earlier stages in project development. The Proposed Rule would require PER applicants to provide "[s]pecific sections of the Class 3 front-end engineering and design (FEED) study (or studies) … or similar indication of project maturity such as project specification and cost estimation sufficient to inform a final investment decision, as determined by the DOE, that has been completed for each qualified facility at which the applicant produces the eligible fuel."[37] This requires producers to conduct the level of FEED analysis generally necessary to make a final investment decision ("FID") prior to even *applying* for an EV from DOE. And, as discussed above, subsequent to obtaining an EV from DOE, the producer must still petition for and obtain a PER from the IRS. Since the result of a PER determination may be material to the FID, projects will be left in limbo for months or years because, despite completing a FEED study, the project cannot proceed with FID until *first* DOE evaluates and issues an EV *and then* IRS accepts a PER petition.

To mitigate this potential for delay, we encourage IRS to allow producers to initiate the EV and PER petition process using Class 4 estimates or other indications of project maturity that can be demonstrated prior to a project approaching FID. At a minimum, Class 3 FEED or equivalent should not be required until the PER petition before IRS, rather than the initial DOE EV request.

Lastly, Growth Energy supports the relation back of PERs and other newly-established emissions rates to January 1, 2025 to mitigate the impacts of delays in the PER petition

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[31] *Notice of Intent To Publish the 45Z Emissions Value Request Process*, 90 Fed. Reg. 34,855 (July 25, 2025).
[32] Proposed 1.45Z-5.
[33] Proposed § 1.45Z-4(g)(3).
[34] 17 C.C.R. § 95500 (requiring third-party verification for "Fuel pathway applicants supplying site-specific CI data for the fuel pathway application", among others).
[35] ICAO, *CORSIA Methodology For Calculating Actual Life Cycle Emissions Values* at 15 (June 2025) (requiring that a third-party "certification body has verified that the economic operator has accurately followed the methodology specified in this document to calculate its actual LCA value using the most recent and scientifically rigorous data available, and that the LCA value calculation is complete, accurate and transparent.").
[36] 40 C.F.R. § 80.1451(g); *Id.* § 80.1450(g).
[37] Proposed Rule at 5,198.

process.[38] However, while helpful, this does not obviate the need for efficiency in the petition process, as establishing an emissions rate early in the development process can be critical for producers to attract investment. At a minimum, IRS should coordinate closely with DOE to open the EV request process as soon as possible.

V. Growth Energy Supports the Proposed Definition of Qualified Sale and Requests Clarification on Documentation Requirements.

Growth Energy thanks the IRS for clarifying that "qualified sale" includes "the sale of fuel to an unrelated person that subsequently resells the fuel in its trade or business," and encourages the IRS to finalize this proposed definition.[39] We further encourage IRS in the final rule to clarify documentation sufficient to establish a "qualified sale" in a manner consistent with the practicalities of the existing fuel distribution market.

First, IRS should clarify that sales contracts between the taxpayer and third parties are sufficient to substantiate qualified sales under the proposed § 1.45Z-4(g)(3) safe harbor. This safe harbor provides that a taxpayer may demonstrate a "qualified sale" by obtaining from the purchaser a certificate "prior to or at the time of sale" asserting that the purchaser is unrelated to the taxpayer and that the transportation fuel will be used by the purchaser in one of three qualifying ways.[40]

However, alternative documentation to the prescribed model certificate should be sufficient to establish the safe harbor, particularly where the information specified in the model certificate is largely duplicative of that in standard sales documentation such as invoices and trade confirmations already utilized by market participants. Specifically, the Proposed Rule indicates that the IRS "may provide other methods through which a taxpayer may substantiate a qualified sale" other than the qualified sale model certificate in § 1.45Z-4(g)(3)(ii).[41] We urge the agency to allow taxpayers to substantiate a qualified sale and establish the safe harbor by providing either: (1) sales contracts and any supplemental documentation from which the existence of a qualified sale may be ascertained, or (2) certifications or sales contracts and supplemental information from terminals where multiple taxpayers' fuel products have been commingled. Terminal operators' reconciliation of sales volumes should also be sufficient to establish a safe harbor in lieu of obtaining documentation from the purchaser.

For most transactions, it will be apparent from the sales contract or trade confirmation that a transaction is a qualified sale. On rare occasions where a sales contract may be incomplete or otherwise lack information relevant to the qualified sale criteria, taxpayers may choose to provide supplemental information, such as a taxpayer's certification that the purchaser is an unrelated entity. We therefore encourage the IRS to clarify that various sales documentation may be used to substantiate a qualified sale for safe harbor purposes, consistent with the statutory and regulatory definitions.

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[38] Proposed Rule at 5,173.
[39] Proposed Rule at 5,167.
[40] Proposed § 1.45Z-4(g)(3)(i).
[41] *Id*.

Further, IRS should allow certification of qualified sales for the safe harbor to apply retroactively for any sales made between January 1, 2025 and the date that this Proposed Rule, including the § 1.45Z-4(g)(3)(ii) model certificate, is finalized.

Relatedly, Growth Energy supports and encourages IRS to finalize the addition of ASTM D8651 for undenatured ethanol within the definition of "low-GHG ethanol,"[42] which further affirms that undenatured ethanol for export may qualify for 45Z Credit as fuel that is "suitable for use" in highway vehicles or aircraft (or may be blended into such a fuel mixture).[43]

VI. Prevailing Wage Criteria Should be Flexible to Industry Realities.

The prevailing wage criteria are important components of the 45Z Credit; however, as Growth Energy has explained in prior comments, these criteria should be flexible to the practical realities of rural markets.

a. Flexibility is needed for rural markets where available workforce is limited.

To claim additional credit for meeting prevailing wage criteria, taxpayers must pay the wages set by the Department of Labor ("DOL") under general wage determinations for a geographic area.[44] However, due to the unique geography of biofuels production and the types of labor required, biofuels producers are encountering situations where there is no DOL-issued prevailing wage determination or labor classification in the county in which their facilities are situated despite there being such determination/classification in an adjacent county. We understand that this may be the case where DOL does not have enough data to publish a prevailing wage determination or classification for a specific locality.

The current IRS regulations provide that, in such circumstances, taxpayers may request "supplemental wage determinations" or "additional classifications and rates for those localities or specific types of labor.[45] These additional procedural steps pose multiple challenges that could be avoided through an easily-administered solution. First, the supplemental wage determination processes impose regulatory burdens on DOL that may result in untimely processing of such requests, where it is critical that the biofuels producer has certainty regarding magnitude of credit eligibility for fuel pricing and other considerations. The regulations provide that "[t]he Wage and Hour Division will resolve requests for a prevailing wage rate for an additional classification within 30 days of receipt of the request or will advise the requester within the 30-day period that additional time is necessary."[46] Despite establishing a presumptive 30-day timeline, however, the rule provides no means of relief to taxpayers if DOL requests an open-ended amount of additional time or otherwise does not process the request in a timely manner.

To avoid lengthy delays that can cause significant uncertainty for biofuels producers, the IRS should amend the regulations to allow taxpayers to use the relevant prevailing wage determination or labor classification from the nearest locality when DOL is unable to provide

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[42] Proposed § 1.45Z-1(b)(24)(ii)(E)
[43] Proposed § 1.45Z-1(b)(34)(ii).
[44] 26 C.F.R. § 1.45-7(b)(1).
[45] 26 C.F.R. § 1.45-7(b)(3).
[46] 26 C.F.R. § 1.45-7(b)(3)(iii).

one within the allotted 30-day timeframe. Doing so would align with the IRS' treatment of offshore facilities, for which "in lieu of requesting a supplemental wage determination" a taxpayer "may rely on the general wage determination for the relevant category of construction that is applicable in the geographic area closest to the area in which the qualified facility will be located."[47] IRS can apply this same approach to onshore facilities in geographic areas lacking applicable wage determinations. This approach would still allow DOL to make determinations once it has sufficient data to do so while providing taxpayers with a safe harbor for claiming the prevailing wage tax credit in cases where DOL is unable to provide such determinations within the prescribed timeframe.

b. IRS should ensure compliance mechanisms are reasonable and should afford flexibility to taxpayers in correcting unintentional non-compliance.

Growth Energy understands and appreciates the importance of including compliance mechanisms to ensure that prevailing wages are actually paid to laborers when claimed by a taxpayer. The current regulations establish penalties for failure to satisfy the prevailing wage requirements (and failure to correct inadequate payments).[48] These regulations further establish heightened penalties if the IRS determines that there was an intentional disregard of the prevailing wage requirements.[49] To make this determination, the IRS considers various facts and circumstances, including (among others) whether taxpayers conducted reviews on a quarterly or more frequent basis as to (a) what the prevailing wage classifications are, (b) what the prevailing wage rates are, and (c) whether payroll reflects proper payment of prevailing wages.[50]

While Growth Energy appreciates the importance of reviewing such data on a periodic basis to ensure and demonstrate compliance, *quarterly* reviews impose an unnecessary burden on taxpayers. Growth Energy requests that IRS amend this provision to allow for *annual* reviews of applicable prevailing wage requirements and payroll compliance to demonstrate that there was no intentional disregard of the prevailing wage requirements.

Further, if a taxpayer has not intentionally disregarded the prevailing wage requirements and has made comprehensive and fulsome efforts to obtain the identity of a laborer or mechanic that may have completed prevailing wage covered work, the taxpayer should be given flexibility to fully cure the potential violation by remitting funds to state unclaimed property funds, paying a penalty to the IRS, and/or establishing an escrow account that would be available to individuals that alert the taxpayer that a corrective payment may be owed to the individual.

Finally, to avoid any confusion and ensure that biofuels producers are claiming the full credit for which they are eligible, IRS should clarify in guidance or in the final Section 45Z regulations that, in order to claim the additional prevailing wage credit, taxpayers will only need to demonstrate compliance with prevailing wage requirements for the taxable year in which they are claiming the credit. Taxpayers would not need to meet prevailing wages requirements in any year prior or any year following the taxable year for which the credit is being claimed. This

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[47] 26 C.F.R. § 1.45-7(b)(3)(iv).
[48] *See* 26 C.F.R. § 1.45-7(c).
[49] *See* 26 C.F.R. § 1.45-7(c)(3).
[50] *See* 26 C.F.R. § 1.45-7(c)(3)(iii)(B), (C), (F).

clarification aligns with the statutory language on prevailing wage requirements for Section 45Z and avoids potential confusion that could lead to unnecessary burdens on taxpayers.

c. IRS should provide a de minimis threshold and/or safe harbor distinguishing between maintenance work and alteration or repair work.

Prevailing wage requirements are applicable to "construction, alteration, or repair of a similar character."[51] These terms are defined to exclude maintenance work, described as work that is "designed to maintain and preserve functionality of a facility after it is placed in service [including] regular inspections of the facility, regular cleaning and janitorial work, regular replacement of materials with limited lifespans such as filters and light bulbs, and the regular calibration of equipment."[52] However, given the broad range of work necessary to support a biorefinery, it may not always be clear whether a particular activity is best categorized as maintenance work, on the one hand, or alteration or repair work, on the other. We therefore encourage the IRS to establish a *de minimis* cost threshold, below which work can be classified as routine maintenance rather than alteration or repair. Additionally, or at a minimum alternatively, we encourage the IRS to establish a safe harbor allowing taxpayers to rely upon a contractor's certification of whether the work conducted was maintenance or alteration/repair in nature.

VII. IRS Should Adjust the SAF Certification Process to Ease Potential Bottlenecks and Administrative Complications.

As a general matter, Growth Energy supports IRS' proposal to designate 45ZCF-GREET as a "similar methodology" to CORSIA for purposes of determining the emissions rate for SAF transportation fuel,[53] and to utilize individuals accredited under either the American National Standards Institute National Accreditation Board ("ANAB") or under the California Low Carbon Fuel Standard ("LCFS") program to certify fuels consistent with 26 U.S.C. § 45Z(f)(1)(A)(i)(II)(B).[54] In this section, we provide recommendations to further improve and streamline this certification process.

First, we encourage IRS to expand the pool of eligible certifiers to ensure adequate capacity exists as the SAF market continues to grow. In addition to verifiers registered under the California LCFS program, IRS should accept verifiers registered under analogous clean fuels standards in other states, including the Oregon Clean Fuels Program, Washington Clean Fuels Standard, and New Mexico Clean Transportation Fuel Program. Moreover, any individuals with accreditations recognized under proposed § 1.45Z-5(b)(3)(i) to certify taxpayers who use CORSIA to establish emissions rates should similarly be recognized as capable of certifying taxpayers who use 45ZCF-GREET to establish rates under § 1.45Z-5(b)(3)(ii).

Additionally, with respect to certification requirements for verifying an emissions rate, while Growth Energy recognizes the importance of accuracy in measurement and periodic instrument calibration, annual calibration of metering equipment, as set forth in the Proposed Rule, is unnecessary and not practical at all production facilities.[55] Maintenance and calibration

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[51] 26 U.S.C. § 45(b)(7)(A)(ii), as incorporated by *id.* § 45Z(f)(6); 26 C.F.R. § 1.45-7(a)(1).
[52] 26 C.F.R. § 1.45-7(d)(3).
[53] Proposed Rule at 5,172.
[54] Proposed § 1.45Z-5(3)(ii).
[55] Proposed § 1.45Z-5(f)(6).

needs vary considerably by the specific equipment at issue. For example, steam meters are certified and calibrated upon installation and then verified through monthly accounting reconciliation using the monthly energy allocation reporting. The steam meter will not deviate from its initial calibration unless there is a failure, which will become evident in the monthly data.

The Proposed Rule's one-size-fits-all approach is therefore inappropriate, and could be costly, unnecessary, or simply not applicable to the metering equipment at issue. IRS should instead tailor the calibration requirements in the 45Z Credit regulations to the particular maintenance and calibration requirements suggested by the original equipment manufacturer ("OEM").

VIII. Anti-Stacking Clarifications

Growth Energy supports IRS' clarifications to the anti-stacking provisions indicating that taxpayers may make separate elections for each taxable year regarding which anti-stacking credit to claim.[56] IRS should further clarify that, consistent with the definition in Proposed § 1.45Z-1(b)(18)(iv)(A) that carbon capture equipment is included in a "facility" only "if such carbon capture equipment contributes to the lifecycle GHG emissions rate," use of carbon capture equipment that does *not* contribute to the emissions rate for a transportation fuel for which 45Z credit is claimed, does not preclude a taxpayers claim for 45Q credit.[57] For example, if an ethanol producer (a) produces low-GHG ethanol as calculated using 45ZCF-GREET *without* consideration of carbon intensity emissions reductions associated with sequestration of carbon dioxide from process emissions and (b) sequesters carbon dioxide from the facility consistent with 45Q, the producer should be eligible to claim both 45Q and 45Z as it avoids Congress's intended prohibition against "double-counting" the same activity. Growth Energy requests that IRS clarify Example 4 in the final anti-stacking regulations to clarify this circumstance.

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Growth Energy appreciates the IRS' consideration of this input as it works to finalize the Section 45Z regulations. We look forward to engaging further on this important work and would be happy to meet with your staff to present on these issues in more detail and answer any questions.

Sincerely,

Chris Bliley
Senior Vice President of Regulatory Affairs
Growth Energy

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[56] Proposed § 1.45Z-4(b).
[57] Proposed § 1.45Z-1(b)(18)(iv)(A).

CC:

The Honorable Brooke Rollins, Secretary, U.S. Department of Agriculture

The Honorable Chris Wright, Secretary, U.S. Department of Energy

The Honorable Sean Duffy, Secretary, U.S. Department of Transportation

The Honorable Lee Zeldin, Administrator, U.S. Environmental Protection Agency