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February 10, 2023

U.S. Environmental Protection Agency
EPA Docket Center, Air Docket
1200 Pennsylvania Avenue NW
Washington, DC 20460

Re: Docket # EPA-HQ-OAR-2021-0427

Comments of the American Fuel & Petrochemical Manufacturers on the Environmental Protection Agency Notice of Proposed Rulemaking, *Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes*

I. Introduction

The American Fuel & Petrochemical Manufacturers (AFPM) appreciates the opportunity to comment on the Environmental Protection Agency's (EPA or the Agency) Notice of Proposed Rulemaking, *Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes* (the proposal).[1] AFPM is a national trade association whose members own and operate most of the United States' refining and petrochemical manufacturing capacity. AFPM supports sound policies that enable our members to supply the fuel and petrochemicals that growing global populations and economies need to thrive, and to do so in an environmentally sustainable way. AFPM members are directly regulated as obligated parties under the RFS and will be substantially affected by this rulemaking.

This proposal represents the first time that EPA is employing the RFS "Set" criteria for cellulosic biofuel, advanced biofuel, and total renewable fuel. EPA is applying the statutory criteria in Clean Air Act (CAA) §211(o)(2)(B)(ii) to promulgate renewable volume obligations for these fuels without reference to the statutory RFS tables that were applicable in prior years. Because this proposal could set the course for future RFS rules, it is very important that EPA get this first comprehensive Set rule right. To that end, AFPM has several comments, summarized as follows:

[1] *See* 87 *Federal Register at* 80,852 (December 30, 2022).

- The statute requires EPA to promulgate the Set rule "no later than 14 months before the first year for which such applicable volume will apply." [2] The proposal falls short of that unambiguous requirement for 2023 and 2024. Proper application of the Set criteria requires EPA to set the new RFS volumes for 2023 and 2024 at no higher than the *volumes finalized for the 2022 standard* until EPA issues an annual rule in advance of the 14-month statutory lead time.[3] In the event actual production in 2023 or 2024 falls short of the 2022 standard, EPA should exercise its waiver authority based on inadequate domestic supply or other relevant statutory authority.

- Based on our expert opinion as the primary participants in the RIN market, setting the implied conventional mandate to reflect actual ethanol consumption would lower the D6 RIN price without altering ethanol's historical market share.

- For 2025 (the first year where EPA may be able to meet the statutory lead time requirement), EPA must first consider the historical consumption of renewable fuels under the program and then apply the set criteria.[4] Doing so objectively would result in renewable volume obligations (RVOs) where (1) the implied conventional standard (the difference between the total renewable fuel standard and the advanced renewable fuel standard) reflects that approximately 10 percent ethanol will be consumed in the gasoline supply regardless of the D6 RIN price; (2) biomass-based diesel (BBD) is set at the 1 billion gallon statutory floor to allow market competition under the advanced biofuel category; (3) the cellulosic volume is set at actual production of liquid cellulosic fuel and biogas (subject to direct purchaser agreements to verify the fuel is consumed in transportation); and (4) an advanced biofuel standard is based on cost-effective domestic production.

- EPA should withdraw the 250-million-gallon supplemental mandate and the unlawful attempt to incorporate eRINs into EPA's determination of cellulosic biofuel and total renewable fuel.

II. Regulatory Process

This proposal is the first time in the program's history EPA is not informed by statutory target volumes established by Congress. Given the complexity and significance of setting multi-year RFS Set standards while adding an eRINs proposal and other RFS program changes, the 60-day comment period did not provide stakeholders adequate time to meaningfully participate. This alone is a reason to find the final rule unlawful.

[2] 42 U.S.C. § 7545(o)(2)(B)(ii).
[3] CAA § 7545 (o)(2)(B)(ii).
[4] *See id.*

A. Request for Extension

On January 20, 2023, EPA denied AFPM's request to extend the comment period. The refining industry is impacted by every aspect of the proposal. Moreover, this proposal is not a typical RFS annual rule in that it implements the transition of mature ethanol and biodiesel industries away from aspirational goals set by Congress to a new framework that requires EPA to apply multiple enumerated criteria to implement real world, achievable, cost-effective standards ("Set"). But until the proposed rule was made public, obligated parties had no prior notice of how EPA would evaluate these criteria, how many years in which EPA might impose these new obligations, nor how EPA would evaluate and weigh criteria against each other – and they still don't. Obligated parties also had no forewarning of how EPA intended to introduce an entirely new renewable electricity program into the RFS that departs from longstanding methodologies for RIN generation and compliance, as well as including other RFS program changes.

Expecting stakeholders to fully comprehend the novel issues raised in this proposal, review EPA's supporting technical analysis, and assess the impacts of the proposed rule in the brief time provided is unrealistic, particularly when EPA has been on notice that it would need to utilize CAA Section 211(o)(2)(B)(ii) criteria for 2023 and subsequent years since the Energy Independence and Security Act (EISA) was approved in 2007. The prepublication edition of the proposal numbered almost 700 pages, with an additional 500+ page Draft Regulatory Impact Analysis, and over 400 supporting documents posted to the docket on December 13th. Denying a 60-day extension, while EPA is more than 500 days past the rulemaking deadline, is unreasonable. To the extent the D.C. Circuit approved a negotiated deadline for issuance of the final rule, EPA should have explored the issue with the petitioner and approached the court with AFPM's request. Instead, EPA took more than three weeks to issue a one-page denial letter.

B. EPA Should Bifurcate This Rulemaking

After adjusting the proposed standards as outlined below, AFPM would support action by EPA to finalize the overdue 2023 and 2024 standards as well as to promulgate 2025 standards in a timeframe that complies with the new 14-month lead time requirements.[5] To effectuate this, we recommend EPA finalize the 2023-2025 volume obligations and separate Section VIII, *Regulatory Program for Renewable Electricity* and all of Section IX, *Other Changes to Regulations* into a stand-alone rulemaking. This action would allow EPA to issue the volumetric standards by the June 14, 2023 court-approved, negotiated deadline. By not finalizing Section VIII and Section IX and considering those issues in a separate rulemaking, EPA would give obligated parties the opportunity to better understand and comment on the novel and unprecedented eRIN proposal and other significant changes to the RFS program. Indeed, bifurcation is appropriate, given the CAA lead time requirements preclude EPA from cellulosic

[5] 42 U.S.C.§ 7545 (o)(2)(B)(ii).

volume increases attributable to eRINs any sooner than the 2025 compliance year. AFPM requested EPA bifurcate the eRIN issue in the association's request to extend the comment deadline and EPA has yet to respond.

The eRIN regulatory structure requires a thoughtful response requiring additional time. Stakeholders require the opportunity to adequately understand and provide comments on EPA's proposed approach, as well as alternatives that EPA identified. The regulatory changes to eRINs will significantly impact fuel refiners as obligated parties under the RFS program as well as other entities. Within the proposal, EPA has not provided adequate information to stakeholders to explain how eRINs would work and how they could impact the operation of the RIN market. Moreover, EPA's proposal for the generation of RINs based on electricity consumed by vehicles is inconsistent with every previous RFS rule promulgated by the Agency on the basis of liquid and gaseous renewable fuels. Re-proposing the novel program structure, with additional analyses quantifying its impacts, is necessary for our industry to fully participate in the comment process.

C. EPA Should Not Include 2026 in the Final Rule

Obligated parties sorely need regulatory certainty and RFS program stability. AFPM supported EPA's plan to implement prospective multi-year RFS standards in the RFS set process. However, EPA missed the 14-month lead time requirement for 2023 and 2024, and the 2025 standards are anticipated to be finalized only a few months ahead of schedule. EPA should not include the 2026 standards due to EPA's compressed period to review comments and due to the unresolved uncertainties in EPA's implementation of the program. By describing "possible" 2026 RFS volumes in two paragraphs of text and exceedingly general terms (*e.g.*, that EPA would increase volumes at rates "consistent with" presumed growth rates for advanced biofuels and that renewable electricity would be subject to "projected growth")[6] EPA has not provided a sufficient basis upon which it could finalize standards for that year. Thus, as described above, EPA should finalize the 2023 to 2025 standards by the June 14, 2023 deadline, and address eRINs and the other changes to the regulations in a separate regulatory action. .

III. RFS Set – A New Methodology

This RFS Set rulemaking, unlike past rulemakings, represents a paradigm shift in how EPA is to implement the program. The CAA directs EPA to first consider the historical consumption of renewable fuels under the program and then apply the set criteria to various categories of renewable fuels to establish volumes that are reasonably achievable based on prior implementation of the program.[7] EPA must consider the following: (1) environmental impacts; (2) energy security; (3) expected annual rate of future biofuels production; (4) infrastructure impacts; (5) consumer fuel costs and the cost to transport goods; and (6) "other factors,"

[6] 87 Fed. Reg. at 80,628.
[7] *See id.*

including job creation, the price and supply of agricultural commodities, rural economic development, and food prices. This is a brand-new approach to setting the cellulosic, advanced biofuel, and implied conventional biofuel volumes and EPA must articulate an objective repeatable methodology describing how it is applying the statutory criteria to each annual renewable fuel standard. EPA failed in this critical task.

As discussed in the proposal, EPA only quantified and monetized two of the above criteria (fuel costs and energy security benefits) and the expected impacts on the candidate volumes.[8] EPA's analysis and application of these factors are inadequate. Based on EPA's proposal, energy security benefits are $634 million, while the increased societal cost to fuel prices is $29.5 billion.[9] The cost of this proposed rulemaking is 46.5 times more than the supposed benefits, even without EPA monetizing billions of dollars in additional costs that have been ignored. The Agency notes "…that the quantified energy security benefits of this rule, while significant, are dwarfed by the quantified costs… which are more than an order of magnitude greater."[10]

Rather than **quantifying the impacts** on the issues raised in the statutory criteria, EPA issued broad qualitative assertions that the proposal is consistent with policy objectives. This does not afford obligated parties and other stakeholders line of sight into a methodology that is predictable, as opposed to one that shifts with the political winds. EPA cannot shroud the application of the criteria in a qualitative black box. Nor can it substitute a claimed policy objective for analysis of the factors Congress explicitly directed the Agency to address. Indeed, EPA treated the Set criteria as a blank slate upon which to force future growth of renewable fuels. The Set criteria, however, are not aspirational. For example, all the statutory criteria require EPA to consider the impact of the use of renewable fuels except criterion III, which instructs EPA to analyze "the expected annual rate of future commercial production of renewable fuels. . .." Congress chose the phrase "expected annual rate," not "maximum amount," or other terminology that suggests anything other than the real-world rate of renewable fuel production uninfluenced by the rule EPA is working to implement. Setting an aspirational volume and then using the other statutory criteria to justify that policy determination is not how Congress directed EPA to implement this phase of the RFS program.

AFPM continues to recommend a transparent and predictable methodology that if implemented would minimize program costs and disruptions to obligated parties, while achieving the core objectives of the RFS program. Simply put, EPA should simplify compliance by tying the implied conventional biofuel obligation to a reasonable projection of ethanol consumption, and the advanced biofuel requirements to a realistic estimate of domestic advanced biofuel production. With the methodology so set, EPA should focus its resources on

[8] 87 Federal Register at 80,615.
[9] Draft RIA ("DRIA") at iv (Table ES-1).
[10] DRIA at 303.

reviewing and approving feedstocks and pathways for liquid fuels and considering opportunities to reduce the carbon intensity of transportation fuels more effectively under the RFS program.

Below we detail some of the inadequacies of EPA's analyses of the statutory factors for each category of renewable fuel. Given the brief time we have had to prepare these comments, this is not a complete list, and in some instances, additional research is needed to provide informed comments. Before addressing the statutory criteria, however, we discuss the consequences surrounding the new lead time requirements in the context of this rulemaking.

Recent D.C. Circuit opinions have found fault with the Agency's handling of the required Endangered Species Act (ESA) analyses in prior RFS rulemakings.[11] EPA states they have "…been engaged in informal consultation including technical assistance discussion with the [USFWS] regarding the rule."[12] In the Draft Regulatory Impact Analysis (DRIA), the Agency states it is still evaluating the impacts on endangered species from the RFS Program.[13] Prior ESA consultations on rulemakings with nationwide effect have often dragged on for years.

If EPA proceeds to finalize the 2023-2025 proposal without completing its consultation obligations under the ESA, it will incur both policy and legal risk. As a matter of policy, finalizing a large increase in biofuels requirements without having conducted the required ESA analysis, and without having engaged in whatever steps that analysis indicates as necessary to mitigate the requirements' potential effects on endangered species, obviously increases the likelihood that such effects will ensue. Indeed, such effects will be more serious than they would have been had EPA either fulfilled its ESA obligations or, at a minimum, refrained from materially increasing volume requirements beyond those of the last annual rule that the D.C. Circuit did not hold to be deficient with respect to the ESA (*i.e*., the 2017 RFS) until it fulfilled its ESA obligations.

After previously remanding the 2018 RFS to EPA based on the Agency's failure to determine whether that rule may affect endangered species or critical habitat, in July 2021 the D.C. Circuit remanded the 2019 RFS rule to EPA without vacatur, for the Agency to reassess its species effects determination and severe environmental harm waiver decision.[14] Litigation regarding the 2020 RFS, where EPA also failed to consult and complete an ESA analysis, remains in abeyance. Thus, for EPA to propose this significant increase in RFS volumes for 2023 to 2025 (five to seven years following being informed by the D.C. Circuit that it is violating its statutory duties under the ESA) and before the Agency has complied with the previous decisions to reassess its endangered species and critical habitat analyses raises serious questions as to its authority to proceed. To promulgate a rule that has any chance of withstanding legal scrutiny, EPA must fully come to grips with the implications of the court's ruling for the 2018 and 2019

[11] *Growth Energy v. EPA*, 5. F.4th 1, 31-32 (D.C. Cir. 2021); *see also AFPM v. EPA*, 937 F.3d 559, 597 (D.C. Cir. 2019).
[12] 87 Federal Register at 80,587.
[13] DRIA at 265.
[14] *Growth Energy*, 5 F.4th at 34.

rules and deficiencies in its successive annual rulemakings such as this one, and for the RFS program as a whole.

A. Without the Statutorily-Prescribed Lead Time, EPA is Required to Finalize RFS Volumes for 2023 and 2024 That Are Based on the Renewable Volumes Promulgated for 2022.

As the RFS transitions to promulgating standards under the Set criteria, EPA must respect that Congress extended lead time requirements from one month to 14 months for 2023 and later years in order to protect obligated parties from less predictable changes to their current obligations.[15] For obligated parties it is critical to provide sufficient notice to allow for a compliance program in a statute untethered by the volumetric tables for the first time. Prior to publication of the proposed rule, parties were not – and could not – be on notice of how EPA intended to approach setting new standards under the Set criteria, for how many years EPA might set RFS standards, and how EPA would change its methodology to promulgate standards from the methods utilized in 2010 to 2022. In short, obligated parties could have no reasonable expectations of how EPA would approach setting standards for 2023 and later years, greatly inhibiting their ability to plan for compliance.

In this situation, EPA's discretion in setting volumes is limited when it does not issue standards in accordance with the statute's lead time requirements. This is necessary to mitigate the harm to obligated parties from rules that cannot be predicted in advance and for which the Agency has not issued a Notice of Data Availability or an Advance Notice of Proposed Rulemaking in order to lay out its thinking ahead of time.

In 2023 and 2024, when EPA will finalize its rule without the 14-month lead time required by the CAA, EPA must recognize that the opportunity to react to increases in obligations is extremely limited. 2023 requirements will not be finalized until half of the current compliance year is over. For 2024, obligated parties will have less than six months advance notice. In this situation (and absent extenuating circumstances not present in this rulemaking period), EPA must finalize RVO's for 2023 and 2024 that are at or below the obligations created in 2022 – the most recent year for which EPA promulgated an RFS implementation rule.

B. Conventional Biofuel

EPA should not miss the opportunity to align the RFS with market realities. Indeed, the RFS requires EPA to review the implementation of the program since 2010 to ensure that the program going forward reflects the market realities of renewable fuels after 12 years of

[15] EPA cites D.C. Circuit case law as supporting its ability to establish both late and retroactive RFS standards. 87 Federal Register 80,590. But in *Monroe*, the D.C. Circuit noted that "[o]bligated parties had long been aware of the applicable volumes prescribed in the statute." The court also noted that "[t]he only major point of uncertainty was whether EPA would reduce any of the applicable volumes pursuant to its waiver authority." *Monroe Energy v. EPA*, 750 F.3d 909 (2014). Both conditions do not exist here in this rulemaking.

aggressive mandates.[16] To be clear, Congress never created a 15-billion-gallon ethanol *mandate*[17] and EPA now must apply the Set criteria in a manner that ultimately reflects the amount of ethanol that reasonably can be consumed in the market. EPA fails to do this in a rational way. As shown below, EPA cannot interpret the Set criteria in a way that yields a volume of conventional fuel that the Agency itself acknowledges will not be met and that the market does not command. Similarly, EPA should not impose an artificially high requirement that increases the costs of the program without resulting in additional ethanol consumption. The U.S. Energy Information Administration (EIA) Short Term Energy Outlook for January 2023 projects 13.95 billion gallons of ethanol will be consumed in 2023, and 14.1 billion gallons in 2024.

Congress established RFS volume targets that assumed constant growth in gasoline demand that would allow a corresponding increase in ethanol consumption. Based on estimates of the amount of gasoline that would be consumed in future years, Congress never intended the amount of ethanol to exceed 10 percent of the gasoline supply (*i.e.*, the blendwall). Beginning in 2023, Congress directed EPA to consider a set of factors that should have led the Agency to propose a total renewable fuel standard based on ethanol consumption that is approximately 10 percent of the forecasted gasoline consumption. EPA acknowledges that reaching 15 billion gallons of annual ethanol consumption by 2025 is infeasible, and yet proposes to increase this volume to 15.25 billion gallons in 2024 and 2025 for reasons not consistent with the statutory criteria. For example, EPA's stated rationale in proposing unachievable conventional biofuel standards is because the Agency desires to contribute to the economic attractiveness of higher-level ethanol blends and their associated greenhouse gas (GHG) reduction and energy security impacts.[18] Presumably, high RIN prices are the intended catalyst, but recent history shows high RIN prices have not resulted in additional ethanol blending. RIN prices have remained over $1.00 for the last two years, while E15 and E85 availability over that same period has remained low.[19] And EPA acknowledges that these costs are not needed to maintain current levels of ethanol blending, stating:

> *Economic and market factors alone were more than sufficient to drive the expansion of corn ethanol plants and increased blending of corn ethanol as E10 since the mid-2000s. Looking out into the future, the economic drivers are expected to remain sufficient to*

[16] *See* 42 U.S.C. § 7545 (o)(2)(B)(ii).
[17] Even if it did, the absence of such a "mandate" in the Set program combined with the specific statutory reference implies Congress did not intend for such a mandate to be presumed during Set years.
[18] 87 Federal Register at 80,626.
[19] E15 and E85 are available at 2% and 4% of retail stations, respectively according to data from Growth Energy (Press Release: *American Drivers Reach 30 Billion Miles on E15.* 6/1/2022), and the U.S. Department of Energy (Alternative Fuels Data Center, Alternative Fueling Station Locator).

result in the continued nationwide blending of corn ethanol as E10 without any added incentive from the RFS program."[20]

A 15-billion-gallon conventional biofuel standard has not resulted in widespread adoption of higher-level blends since it was first implemented in 2015, and EPA offers no rationale to suggest what market or other conditions have changed that would lead to an alternate outcome to realize any supposed benefits. This is an arbitrary and capricious aspect of the rulemaking.

It is clear in EPA's proposed rulemaking and DRIA that the 15.25 billion gallons will not be met. EPA states, "[a]s in past years, we do not expect that the implied conventional renewable volume would be achievable through the consumption of ethanol alone."[21] EPA does not provide a well-reasoned argument for ignoring the rate of production and consumption---one of the set criteria required by statute to be analyzed. By EPA's own estimates in the DRIA on corn ethanol consumption for 2023 is 14.5 billion gallons and 14.6 billion gallons for 2024 and 2025.[22]

The Agency's corn ethanol consumption data is built around expanded use of E15 and E85, which requires additional infrastructure. Flex-fuel vehicle production has declined, and EPA estimates the investment retailers would be required to make at stations for expanded E15 use would be around $108,000 per station, which according to EPA equates to an additional $2.49 per incremental ethanol gallon.[23] Infrastructure and consumer fuel costs are not properly weighted in EPA's analysis of conventional biofuel when setting unachievable standards.

The practical effect of setting an implied conventional standard that is unachievable with ethanol alone is to rely on additional advanced biofuels to meet the standard. But as advanced biofuels have become the marginal fuel of compliance to meet the implied conventional biofuel standard, the price of D6 RINs has approached that of typically more expensive advanced biofuel RINs. The result is significantly higher compliance costs for the D6 RIN market, and no increase in ethanol blending. EPA offers no rationale for its adoption of this smoke and mirror approach to the RFS or explanation for how it comports with its requirement to base RFS volumes on the expected future commercial production of renewable fuels.[24] Moreover, it is contrary to the intent of Congress that directed EPA to ensure a minimum percentage of advanced biofuels when it implements the RFS Set criteria.[25]

C. Biomass-based Diesel Standards

[20] Office of Transportation and Air Quality, Assessment and Standards Division, U.S. EPA. *"Economics of Blending 10 Percent Corn Ethanol into Gasoline"* November 2022 (emphasis added).
[21] 87 Federal Register at 80,602.
[22] DRIA at 380.
[23] DRIA at 467.
[24] 42 U.S.C. § 7545 (o)(2)(B)(ii)(III).
[25] 42 U.S.C. § 7545 (o)(2)(B)(iii).

EPA should set the biomass-based diesel (BBD) standard at the statutory floor of 1 billion gallons. Instead, EPA proposes to increase the BBD volume requirement by 100 million RINs per year, which is equivalent to about 65 million physical gallons. AFPM does not support an increase to the BBD volume requirement and instead supports minimizing the biomass-based diesel standards in the RFS to promote competition within the advanced biofuel category that will lead to the maximum amount of lower carbon advanced fuel at the most cost-effective price.

Compliance with the advanced biofuel standard through the history of the RFS program has largely been achieved with biodiesel, and more recently with renewable diesel. An increase to the BBD volume requirement would cause biodiesel and renewable diesel to further dominate the advanced biofuel category such that other advanced biofuels would not be able to compete against BBD fuels. The BBD category is nested within the advanced biofuel category, which means Congress intended there to be competition among BBD and other advanced fuels to meet the advanced standard. Congress also directed EPA to set the BBD minimum volume based on the 2012 statutory volume (1 billion gallons) to better promote competition within the advanced biofuel category post 2022 by minimizing the BBD volume and did not require EPA use the most recent 2022 volume standard, as it did when it prescribed a minimum advanced to total biofuel ratio.[26]

In the final rule, EPA must not only follow Congress's direction regarding minimizing the biomass-based diesel standard, but also avoid promulgating a rule that would not be a logical outgrowth of the proposal. At the January 10-11 public hearing, several individuals testified recommending EPA provide a specific carve-out for Fatty Acid Methyl Ester (FAME) biodiesel, but EPA had not yet proposed to do so. As such, in this rulemaking EPA cannot finalize this approach, which regardless is prohibited by statute. Congress clearly defined biomass-based diesel to allow for various technologies to compete and recognized that consumers benefit from market competition. Limiting the biomass-based diesel category or providing another specific incentive to FAME biodiesel is outside EPA's authority and would run afoul of the Administrative Procedure Act.

Finally, as discussed in Section VI of these comments, AFPM does not support EPA's proposal to define "produced from renewable biomass" and to modify the definition of "co-processed" in a way that would reduce D4 RIN generation from renewable diesel. If EPA nevertheless adopts the proposed changes, EPA must reduce the biomass-based diesel volumes for 2023-2025 accordingly.

D. Advanced Biofuel Standards

AFPM supports a methodology to set the advanced biofuel standard based on demonstrated domestic production, plus an incremental volume that reflects new production expected to be

[26] 42 U.S.C. § 7545 (o)(2)(B)(iv), (v).

economically available in the subject year. Due to the 14-month lead time requirements discussed earlier, EPA may not increase the 2023 and 2024 advanced biofuel volumes. In projecting a 2025 volume, EPA should first rebalance the advanced and conventional biofuel standards by setting implied standards at levels that match demonstrated production and consumption of biofuels corresponding to each biofuel category. This approach would result in a smaller implied conventional volume that matches ethanol consumption, and a larger advanced volume in 2025. Setting aside volumes attributed to electricity, EPA's proposed total biofuel volume requirement appears to be a reasonable estimate of 2025 biofuel consumption, but only if those biofuels are allocated to the appropriate category. Any increase to the advanced biofuel volume must be linked to a corresponding decrease to the implied conventional volume.

Any adjustments based on increased production should take a conservative approach in projecting advanced biofuels volumes. In the table 6.2.2-1 of the DRIA, EPA identifies 10 specific renewable diesel projects, half of which were scheduled to come online in 2022. EPA should reassess these specific projects and develop a projection that considers the demonstrated ability of renewable diesel producers to ramp up and meet expectations. Projects with longer lead times require a more conservative approach and EPA should expect utilization rates to be consistent with industry peers as well as recognize phased start-up schedules. AFPM estimates that the outcome of this assessment will support volumes near or at the proposed total volume standards for 2025 when volumes attributable to electricity are subtracted, and the imbalance across the implied conventional and advanced standards are corrected.

Congress directed EPA to set RFS standards post-2022 that focus program growth in the advanced biofuels sector by requiring that advanced biofuels meet a minimum percentage of the overall standard.[27] Based on the finalized 2022 volumes, EPA must ensure advanced biofuels constitute at least 27.29% in 2023 and beyond. AFPM's recommended approach exceeds this minimum requirement.

EPA accurately points out that there is increased competition for BBD feedstocks. USDA projections, however, show a steady increase in soybean growth and crush capacity through 2031.[28] Independent EIA analysts project that renewable diesel production projects announced and currently under construction are likely to increase production to as much as 321 thousand barrels per day by 2025.[29] This volume estimate does not consider, as EPA notes in the preamble, that some of the increases in renewable diesel production are likely to come at the expense of reduced FAME biodiesel production. USDA and EIA further acknowledge the long-term trend of increasing renewable diesel volumes by updating their statistical reporting

[27] 42 U.S.C. § 7545 (o)(2)(B)(iii).
[28] EPA-HQ-OAR-2021-0427-0058.
[29] U.S. Energy Information Administration, *U.S. renewable diesel capacity could increase due to announced and developing projects,* July 29, 2021.

tools.[30] EPA's 2025 projection must comply with the statutory lead time requirements and should be based on the latest available data regarding feedstock availability and from new renewable diesel facilities as they start-up production to ensure the 2025 standards accurately reflect expected production in 2025.

E. Cellulosic Biofuel Standards

EPA projects cellulosic volume growth from CNG/LNG derived from biomass, renewable electricity, and liquid cellulosic biofuel. AFPM comments regarding the renewable electricity program are in Section V, *infra*.

Most cellulosic RINs available to date have been generated from CNG/LNG derived from biogas. EPA expects this volume to grow through 2025 and proposes to estimate that growth using the actual rate of growth experienced over the June 2020 to May 2022 timeframe, which is 13.1%. EPA is correct to rely on historical production information and trends in developing a projection of biogas availability. Due to the statutory 14-month lead time constraints, however, EPA may not promulgate increased 2023 or 2024 cellulosic standards. EPA may only use the proposed rate of increase in setting the 2025 cellulosic standard. However, if EPA is to include eRINs within the RFS, the proposed 13.1% rate of increase would assume all new biogas production would be utilized under the CNG/LNG pathway, and EPA should ensure it is not overestimating the overall cellulosic volume by attributing new volumes of biogas to both CNG/LNG and eRIN generation.

EPA should be prepared to continue to exercise its authority to waive the cellulosic volume requirements and issue cellulosic waiver credits (CWC). EPA acknowledges this possibility and expresses its intent to initiate a separate regulatory action, should the circumstances warrant it. EPA's existing notice and comment process is too slow to provide meaningful relief. To increase market certainty and prevent extreme volatility in cellulosic RIN prices, EPA should establish objective parameters that would trigger a waiver. For example, EPA could announce that when EMTS data shows D3 and D7 RIN generation lagging actual volumes promulgated for more than one month, the waiver would be triggered. As proposed, EPA also retains its discretion to exercise waiver authority under circumstances that may not be presently contemplated.

EPA is requesting comment on the potential situation where actual volumes exceed mandated volumes, and potential mechanisms EPA could adopt to ensure cellulosic RIN prices provide sufficient incentives for producers. EPA lacks authority to proceed with this aspect of the proposal, as it would contradict the plain meaning of the 14-month lead time requirements. EPA's only legal path to address the generation of excess cellulosic RINs is to adjust the cellulosic mandate in future years in accordance with the set criteria and the very clear lead time requirements. Congress intended the RFS to be a prospective program with standards fully

[30] For example, USDA's soybean oil balance sheet reflects recent changes EIA made in its Monthly Biofuels Capacity and Feedstocks Report to reflect significant recent growth in production of renewable diesel.

known to all market participants before the compliance period. AFPM opposes mechanisms that retroactively increase the cellulosic standard. Congress allowed obligated parties to carryover RINs into a subsequent compliance year, and a retroactive true-up mechanism eliminates this compliance flexibility.[31] Congress has also provided other incentives to cellulosic biofuel producers to help ensure sufficient incentives are available.

EPA estimates that liquid cellulosic biofuel production is unlikely to produce significant volumes by 2025. Corn kernel fiber may be an exception, but EPA has yet to approve a corresponding pathway and did not include a projection of corn kernel fiber in its projection through 2025. AFPM supports EPA's omission of these volumes because the pathways are not yet approved. EPA should expedite efforts to approve these pathways to include corn kernel fiber volumes in the future.

IV. Supplemental Mandate (2016 Remand).

AFPM opposes EPA's proposal to add a 250 million gallon "supplemental volume" to its 2023 proposed volume in response to the D.C. Circuit's remand of the 2016 rule in *Americans for Clean Energy v. EPA*, 864 F.3d 691 (2017).[32] The D.C. Circuit did not compel this response, which will harm consumers and obligated parties. EPA initially developed this approach when establishing 2022 RFS standards, which is in litigation before the D.C. Circuit.[33] AFPM continues to oppose both supplemental standards for 2022 and 2023.

Adding a supplemental mandate is not required by the court's remand.[34] The court held that EPA erred in interpreting and applying the general waiver, in its "inadequate domestic supply" prong. It did *not* direct EPA to add 500 million gallons to its standards for 2016, let alone for any subsequent year. In fact, the CAA does not authorize EPA to add "supplemental" volumes to 2022 and 2023. To comply with the court's remand, EPA should recognize that there is no action that it could take to incentivize more production in 2016 since the year is over. Alternatively, as discussed in more detail below, EPA should exercise the full extent of its cellulosic waiver authority for 2016 and reduce the advanced and total obligations as originally intended in 2016.

The "supplemental volume" approach also does not further the purposes of the RFS program. Most obviously, it cannot incentivize more biofuel blending in 2016. Adding this supplemental

[31] *Note* the current, regulatory twenty percent cap on RIN carryover would act as a natural ceiling to control the growth of the RIN bank if cellulosic production actually exceeds mandated volumes.

[32] *See, e.g.*, 87 Fed. Reg. 50,582, 80,585 (Dec. 30, 2022).

[33] *See Center for Biological Diversity v. EPA*, D.C. Cir No. 22-1164.

[34] *See DHS v. Regents of Univ. of Calif.*, 140 S. Ct. 1891, 1908 (2020) ("an agency on remand can deal with the problem afresh by taking new agency action. An agency taking this route is not limited to its prior reasons but must comply with the procedural requirements for new agency action.") (internal quotation marks and citations omitted); *Heartland Regional Medical Center v. Leavitt,* 415 F.3d 24, 29-30 (D.C. Cir. 2005) ("[T]he usual rule is that, with or without vacatur, an agency that cures a problem identified by a court is free to reinstate the original result on remand.").

volume to the already high volumes in 2023 may cause more harm than it would have in 2016. EPA's analysis of the supplemental volume fails to grapple with this aspect of the problem, simply suggesting that if the Agency's predictions of adequate supply are incorrect, further drawdown of the RIN bank will fill the gap.[35]

EPA's failure to address the impossibility of a supplemental standard now to affect behavior in 2016 highlights another flaw in its proposed approach; it is not compatible with the design of the RFS statute. Under the statute, EPA is supposed to set annual volume requirements and percentage standards based on careful consideration of the existing market and other factors at the time of rulemaking, and on its projection of the state of the world in the year to which the standard will apply. For 2023, the CAA provides numerous, other factors that EPA must consider.[36] The rulemaking addressed in *Americans for Clean Energy* conducted the required analysis based on the prevailing conditions in 2015, to project volumes for 2016.[37] For EPA merely to take the entire volume at issue in the remand, break it into two halves, and add a supplemental "standard category," is arbitrary and capricious. It undermines, rather than fulfills, EPA's intentions for 2016. Moreover, it causes current obligated parties to bear inequitable, heightened burdens for EPA's past errors, such as in 2016, that Congress never directed them to bear. Given background market changes and the exit and entry of parties from the industry, current obligated parties differ from the set of obligated parties originally subject to the 2016 rule. This causes inequitable impacts that could deprive current obligated parties of due process. These parties were never on notice that Agency errors in a given year could add new regulatory burdens years later with no basis in the statutory text. EPA's claim to be supplementing the 2023 standards does not remedy this failing, for the reasons explained above.

In short, this scheme simply has no place for a capricious insertion of hundreds of millions of gallons in volume requirements, burdening current obligated parties and consumers, based on *EPA*'s error in rationalizing its approach in the 2016 rulemaking.

With respect to either the 2022 RFS or this proposed rule, EPA did not conduct an analysis of the statutory factors in CAA § 211(o)(2)(B)(ii), apparently concluding that the 250-million-gallon supplemental is not subject to this analysis. As required by Executive Order 12866 and Circular A-4, EPA did assess some of the costs, energy security impacts, and GHG emissions. But this analysis does not account for rate of production and consumption, infrastructure, and other economic factors.

The Agency also has projected that "…biodiesel and renewable diesel would be the fuels most likely to be supplied to satisfy the 250-million-gallon supplemental volume requirement."[38] EPA

[35] 87 Fed. Reg. at 80,626.
[36] 42 U.S.C. § 7545(o)(20(B)(ii).
[37] 80 Fed. Reg. at 33,101-33,102.
[38] DRIA at 91.

determined "…that there would be sufficient quantities of biodiesel and renewable diesel available to satisfy the supplemental volume requirement beyond the quantity of these fuels needed to satisfy the BBD, advanced biofuel, and total renewable fuel requirements for 2023."[39] Because 2016 RINs are unavailable, the additional 250-million-gallon supplemental will be met using 2022 and 2023 RINs. Therefore, EPA should be considering these "supplemental" volumes in their main analysis of the achievability of the 2023 standards, rather than simply presuming additional volumes will be available without causing harm or difficulty in complying with the 2023 standards.

Fortunately, there are better options available to EPA to address the court's remand. *First*, EPA should use its statutory authority to lower the total renewable fuel standard for 2016 by the full amount of the cellulosic waiver authority that it exercised in the 2016 rule.[40] This would account for 380 million of the total 500 million gallons at issue in the 2016 Remand.[41] This approach would be consistent with EPA's original determination and intent in the 2016 rulemaking regarding what volumes were achievable at that time.[42] For EPA instead to propose a supplemental standard of 250 million gallons, seven years later, ignores EPA's contemporaneous decisions based on the state of the market going into 2016.[43]

Second, EPA could also exercise its general-waiver authority under CAA § 211(*o*)(7)(A). The predicate for that authority of inadequate domestic supply applies here. EPA may exercise the general waiver authority if, among other scenarios, "there is an inadequate domestic supply."[44] Here, there is *no* supply of 2016-produced biofuel, or RINs associated with that years' biofuel production, available for compliance with the 2016 rule. EPA could therefore invoke its general waiver authority to respond to the 2016 Remand, instead of or in conjunction with exercising the full extent of its cellulosic waiver authority, as suggested above. If EPA does not consider the absence of 2016 renewable fuel or 2016 RINs or to be "inadequate domestic supply," we question whether the Agency's interpretation of this statutory authority renders it a dead letter. EPA is acting arbitrarily in failing to exercise its waiver authorities under these circumstances.

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[39] DRIA at 91.

[40] 42 U.S.C. § 7545(o)(7)(D)(i) ("For any calendar year in which the Administrator makes such a reduction [using the cellulosic waiver authority], the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels requirement established under paragraph (2)(B) by the same or a lesser volume.").

[41] *See* 84 Fed. Reg. at 36, 762, 36,788 (July 29, 2019) (2020 RFS rule proposal) (EPA exercised cellulosic waiver authority in 2016 rulemaking to lower cellulosic volume requirement by 4.02 billion gallons, but only reduced advanced and total biofuel volume requirements by 3.64 billion gallons, leaving 380 million gallons available for further reductions under EPA's statutory authority).

[42] *See, e.g.*, 80 Fed. Reg. 77,420, 77,422/3-77,423/1 (Dec. 14, 2015) (final omnibus rulemaking including 2016 rule) ("[W]e have considered the ability of the market to respond to the standards we set when we assessed the amount of renewable fuel that can be supplied.").

[43] *See, e.g.*, U.S.C. § 7545(o)(3)(A), (B)(i) (EPA to base annual volume requirements on EIA projections for the year in question).

[44] *Id.* § 7545(o)(7)(A)(ii).

V. eRINs

EPA's eRIN proposal exceeds the Agency's statutory authority. There are several legal, technical, and policy issues that require EPA to abandon the eRIN proposal. If EPA proceeds with developing an eRIN program, EPA should separate the eRIN issue from the RFS Set rulemaking and repropose the eRIN program structure with additional analyses. The preamble discussion of eRINs reads more like an Advanced Notice of Proposed Rulemaking, rather than a fully supported proposed rule, and AFPM recommends EPA treat it as such. EPA should consider all of the comments it receives, and then determine if a new proposal is supportable after providing stakeholders with more information and the time they need to fully participate in the rulemaking process. Failure to do so will deprive stakeholders a meaningful opportunity to comment on EPA's rationale.

The remainder of this section discusses the legal, technical, and policy deficiencies with EPA's eRIN proposal.

A. The RFS Does Not Authorize EPA to Implement eRINs

Contrary to EPA's suggestion in the proposed rule, Congress did not authorize or address the major policy choice to permit eRINs when it approved the RFS in 2005 and amended the law in 2007.[45] EPA does not cite appropriate statutory authority for the eRIN proposal. Indeed, the word "electricity" does not appear anywhere in the RFS statutory text, while there are more than one hundred references to liquid fuels.[46] Although electricity, including electricity from various renewable sources, and the potential for electric powered vehicles were well known at the time the RFS was created, Congress directed EPA to study the issue and report back to Congress rather than authorizing EPA to include renewable electricity in the program.

Congress is specific when it wants to include electricity in various energy programs. For example, Congress explicitly included electricity in other sections of Title II of the Clean Air Act[47] relating to mobile sources and in the Energy Policy Act of 1992.[48] Against this backdrop, Congress chose not to include electricity in the definition of "renewable fuel," preferring a separate, more limited definition.[49]

[45] The decision to include any form of electricity in the program would constitute a major question of political and economic significance for which Congress must provide a clear statement. *See* West Virginia v. EPA, 597 U.S. ___ (2022).

[46] *See Chevron U.S.A. Inc. v. Echazabal*, 536 U.S. 73, 80 (2002) ("expressing one item of an associated group or series excludes another left unmentioned.") (cleaned up).

[47] *See e.g.*, 42 U.S.C. Section 241(2) defining "clean alternative fuel" to include electricity.

[48] *See* Energy Policy Act of 1992, 42 U.S.C. 13211(2), defining the term "alternative fuel" to include electricity.

[49] 42 U.S.C. 7545(o)(1)(J).

In addition to the failure to cite EPA's specific authority to implement eRINs, the proposed rule is inconsistent with several other aspects of existing law, as discussed below.[50]

B. Congress Explicitly Withheld the Authority to Implement eRINs

The Energy Independence and Security Act (EISA), which created the current version of the RFS, directly addressed EPA's authority to implement eRINs. Rather than including electricity in CAA section 211(o) when expanding the RFS to include annual standards for cellulosic biofuel, advanced biofuel, and biomass-based diesel, Congress enacted a separate provision requiring EPA to study the issue and then report back to Congress. Section 206 of EISA required EPA to submit a report to Congress that among other things describes "alternatives for … a pilot program to determine the feasibility of using renewable electricity to power electric vehicles as an adjunct to a renewable fuels mandate." EPA has not completed the study, and the report to Congress is now nearly 15 years overdue.[51] Moreover, the use of the term "adjunct" indicates that Congress did not authorize inclusion of a renewable electricity program *within* the existing, authorized RFS program. In fact, Congress has chosen other means to promote electric vehicles, such as providing billions of dollars for electric vehicle tax credits and charging infrastructure.[52]

The absence of any reference to electricity or electric vehicles in the RFS, combined with the requirement for EPA to study the feasibility of a "pilot program" for using renewable electricity eRINs and report its findings to the legislative committees of jurisdiction, is clear evidence that Congress did not delegate authority to EPA to implement eRINs, reserving to itself the decision on whether and how to structure such a program.

C. EPA Lacks Authority to Allow OEMs to Generate RINs Under the RFS

Congress did not authorize EPA to promulgate regulations for eRINs, nor did Congress authorize EPA to require that refiners subsidize the manufacturers of electric vehicles through eRINs. EPA has always cited CAA section 211(o)(5) as authority for the RIN program.[53] This provision provides for the generation of "credits" based on the refining, blending or importation of gasoline. An appropriate number of credits may also be generated "for biodiesel," "additional renewable fuel," as well as by small refineries. eRINs do not fall within any of these categories.

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[50] *See* Pub. L. No. 110-140, § 206(b)-(c) (2007); *see also* 42 U.S.C. 7545(o)(5). *Note* Congress maintained the distinction between the RFS and the Renewable Energy Standard, including electricity in the definition of "alternative Fuel" but omitting it in the RFS definition of "renewable fuel."

[51] Nothing in EPA's 2010 rule responded to the EISA Section 206 requirements, so that obligation remains outstanding, and EPA cannot continue to ignore it. Moreover, EPA's final 2010 rule is entirely different from what EPA is currently proposing with new requirements that apply directly to obligated parties. EPA has therefore reopened its prior interpretations concerning eRINs. *See* 87 Fed. Reg. at 80,584 ("declaring "the RFS program is entering a new phase, and we are introducing a new regulatory program governing renewable electricity.").

[52] *See e.g.*, Public Law 117-169 – August 16, 2022; *see also*, Ghenis, Max. *The Inflation Reduction Act discourages electric vehicle buyers from working.* Ubicenter.org. August 3, 2022. Accessed February 1, 2023. (providing an additional $7.5 billion for new EVs and $1.3 billion for used EVs, with no reference to RFS or EPA authority to implement additional EV subsidies.).

[53] 87 Fed. Reg. at 80,604.

eRINs do not apply to any person that refines, blends or imports gasoline, produces or uses biodiesel or additional renewable fuel, and could not cover the generation of credits by small refineries. Nowhere within CAA section 211(o)(5)(A) is the generation of credits explicitly or implicitly associated with the generation of electricity that may subsequently be used to charge an electric vehicle.

Even if EPA were authorized to implement some version of eRINs, which as described above, it is not, its decision to declare the OEM as the RIN generator contradicts the plain language of the RFS statute. Section 211(o)(5) limits credit generation to entities that "refine, blend, or import" gasoline or additional renewable fuel used in home heating oil or jet fuel.[54] EPA may also provide for the generation of credits for biodiesel.[55] OEMs manufacture vehicles, they do not refine, blend, or import transportation fuel as specified under statute. EPA's selection of OEMs as the eRIN generator has no basis in the statutory text and is further evidence that EPA has exceeded its delegated authority.

EPA also lacks a rational explanation for why it proposes that OEMs be authorized to generate RINs. OEM participation is neither needed nor authorized in the RFS. Data provided by OEMs are available through state DMVs and may be considered more complete and up to date. For example, OEM data may not account for vehicles that have been taken out of service. More importantly, EPA's proposed methodology does not actually account for the use of electricity in vehicles, but pairs "population data for vehicle type with vehicle use data (average annual energy consumption for [battery-electric vehicles] and [plug-in hybrid electric vehicles]" to calculate eRINs.[56] EPA proposes to obtain this information through contracts between OEMs and renewable electricity providers.[57]

Moreover, EPA's proposed methodology allows OEMs to assume that each BEV sold travels 7,200 miles per year on electricity. EPA provides scant to no justification for this electric vehicles miles traveled (eVMT) metric. In table 6.1.4.3-1 of the DRIA EPA provides a jumble of estimated "Light Duty Vehicle Fleet Annual Cumulative" gasoline VMT and BEV eVMT from 2014-2020. However, the cumulative annual BEV eVMT totals—widely ranging from approximately 4,674 to 51,027 miles per year-- can be representative of tracking data from only 1 to 8 BEVs per year. EPA, therefore, is basing a key assumption in its proposal on annual average eVMT estimates that are based on an unreasonably small and unrepresentative sample of BEVs. Regardless, even if EPA had perfect data for eVMT, it could not use this assumption to determine eRIN volumes, because virtually none of those VMT traveled would be fueled with electricity powered by an eligible transportation fuel under the RFS and EPA cannot use unrealistic blanket assumptions to determine otherwise.

[54] 42 U.S.C.§ 7545 (o)(5)(A) and (E); *see also* the definition of "additional renewable fuel" at § 7545(o)(1(A).
[55] *Id.* §7545(o)(5)(A)(ii).
[56] 87 Fed. Reg. at 80,642.
[57] *Id.* at 80,649.

EPA has not analyzed OEMs' market power and quantified how much of the RIN value would be allocated to renewable electricity generators and how much would be kept by OEMs, nor how much of this revenue would simply increase the OEMs' profit margins. EPA projects that 600 million eRINs will be generated in 2024 and 1,200 million RINs in 2025.[58] D3 RIN prices varied between $2.66 and $3.34/RIN in 2022, meaning EPA's proposed rule could generate between $4.86 and $6.01 billion in revenue for OEMS in just those two years.[59] Nothing within the proposed rule requires OEMs to invest such funds within the renewable fuel program. Electric vehicle pricing, particularly for luxury models, is not driven by manufacturers' costs alone,[60] and presumably, such amounts could be simply distributed to shareholders. Such issues are of central relevance to EPA's conclusions that the proposed rule would result in lower electric vehicle prices and more EVs on the road. Yet, EPA did not analyze why this new revenue stream for OEMs would have that result, nor quantify any variables that could affect lower electric vehicle prices. Simply put, EPA did not bring any technical expertise to bear on its conclusions.

Furthermore, EPA fails to recognize that allowing OEMs to generate, separate, and sell eRINs may concentrate monopoly market power among a small number of market participants. DOE data show that just four automakers produced 90% of the domestic electric vehicle fleet.[61] EPA's proposal is poised to create an anticompetitive situation wherein OEMs with no RFS obligation are allowed to control the quantity of eRINs supplied to the market. EPA fails to acknowledge this risk and proposes controls to address the potential for market manipulation. In contrast, EPA addressed the risk of hoarding liquid biofuel RINs in its RFS2 rulemaking by "attaching" RINs to physical biofuel volumes, stating: "*We agree that allowing producers to separate RINs from renewable fuels that they produce would have significant impacts on the RIN distribution system, potentially allowing producers to hoard RINs.*"[62]

D. EPA's Proposed eRIN Program Fails to "Ensure" that Renewable Fuel Will be Used in Transportation.

The RFS requires EPA "to ensure that transportation fuel … *contains* at least the … applicable volume of renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel."[63] EPA ignores this RFS statutory requirement and argues that the definition of "renewable fuel" in CAA section 211(o)(1)(J) allows for eRINs. However, renewable fuel is defined as fuel produced from renewable biomass "that is used to replace or reduce the quantity of fossil fuel *present in* a transportation fuel." EPA's interpretation ignores the statutory text contained in

[58] *Id.* at 80,594.
[59] EPA speculates that some of this additional profit will be "shared" with renewable electricity producers.
[60] Associated Press. *Tesla hikes price of Model Y after U.S. alters tax credit rule.* cnbc.com, February 4, 2023, accessed February 9, 2023.
[61] Alternative Fuels Data Center, U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy. *U.S. Plug-in Electric Vehicle Sales by Model Trend of sales by PEV model, 2011-2019. January 2020.*
[62] Assessment and Standards Division, Office of Transportation and Air Quality, U.S. EPA. Renewable Fuel Standard Program (RFS2) Summary and Analysis of Comments. February 2010. Page 3-231.
[63] 42 U.S.C. § 7545(o)(2)(A)(i).

CAA section 211(o)(2)(A)(i) and 211(o)(1)(J). Electricity does not contain any of these volumes. In the case of renewable biomass used to produce renewable electricity, the renewable fuel does not replace or reduce the quantity of fossil fuel present in a transportation fuel. Instead, it replaces the quantity of fossil fuel present in electric generating units (not motor vehicles).

EPA's proposed eRIN program disregards this statutory requirement by failing to ensure that "renewable fuel" is used for transportation. The RFS, unlike other renewable mandates and incentives, explicitly requires the renewable fuel "to replace or reduce the quantity of fossil fuel present in a transportation fuel."[64] Indeed, since the program's inception, EPA has consistently interpreted the RFS to require that qualifying renewable fuels are consumed in qualifying uses in the United States.

EPA's methodology for calculating transportation electricity ignores this component of the definition and turns its back on the stringent controls placed on biofuel producers and parties in the RIN disposition chain for the existing RIN categories. EPA fails to reconcile the fact that most of the renewable electricity that would generate RINs under EPA's proposed rule may freely be used for purposes unrelated to transportation. EPA has never condoned such remote and vague "calculated usage" of renewable fuel under the RFS, which tracks volumes through rigorous documentation. In fact, EPA has initiated multiple enforcement actions in instances where renewable fuel was not actually consumed in transportation. Renewable fuel producers and obligated parties must account for every gallon of renewable fuel produced, used in the United States when blended into transportation fuel or exported. Yet, the eRIN proposal includes no mechanism to ensure that renewable electricity is used in domestic transportation, particularly with respect to PHEVs which may operate on either liquid fuels or electricity.

Further, in the proposed rule, EPA sets the cellulosic standard so high that it would force refiners to purchase eRINs to satisfy their obligations but with no assurance as to their validity. First, the validity of the eRINs would be heavily dependent upon private contracts between OEMs and renewable electricity producers. It is not clear how EPA would intend to monitor and enforce RFS requirements based on such documents. Second, most of the renewable electricity derived from biomass and placed on the grid would not displace transportation fuel but would instead be directed to homes, offices, and other electric devices from dishwashers to cell phones. Similarly, electric vehicle owners that recharge their vehicles on the grid would receive only a miniscule quantity of renewable electricity derived from biomass.

Notably, the current proposal does <u>not</u> require identifying "the specific quantities of their product which are actually used as a transportation fuel." This, however, was specified as a requirement in EPA's 2010 rule:

> [W]e are allowing fuel producers, importers and end users to include electricity, natural gas, and propane made from renewable biomass as a RIN-generating renewable fuel in

[64] 42 U.S.C. § 7545(o)(1)(J) (definition of "renewable fuel").

> RFS **only if they can identify the specific quantities of their product which are actually used as a transportation fuel**. This may be possible for some portion of renewable electricity and biogas since many of the affected vehicles and equipment are **in centrally-fueled fleets** supplied under contract by a particular producer or importer of natural gas or propane. A producer or importer of renewable electricity or biogas who documents the use of his product in a vehicle or engine through a contractual pathway would be allowed to generate RINs to represent that product, if it met the definition of renewable fuel.[65]

EPA's 2010 rule also makes clear what is required and specifically *prohibits* the methodology being considered now by EPA:

> An affidavit from the biogas supplier stating its intent to supply biogas to the renewable fuel producer, the quantity and energy content of the biogas that it intends to provide to the renewable fuel producer, and a statement that this volume of biogas **will not be used for the creation of a Renewable Energy Credit, or of any other type of environmental or energy attribute or credit**.[66]

Here, EPA is accepting comment on allowing the purchase of Renewable Energy Credits (REC) to qualify as evidence of renewable electricity electrons being transported from one location to a charging station potentially thousands of miles away on another grid and allowing claims that all that electricity was used in an EV. This is physically impossible. No electricity customer on the grid can choose which electrons it receives; on average, 60% of electricity is from fossil fuels. EPA should not supplant the use of the term "REC" with the synonymous use of "contracts…"

EPA's longstanding compliance requirements along with the fact that most of the electricity derived from biomass under this program will not be used in transportation, makes clear that eRINs have no place in the RFS.

E. EPA's Application of the Set-Statutory Criteria to the eRIN Proposal is Deficient.

Even if Congress gave EPA the authority to promulgate regulations for eRINs, which it clearly did not, EPA's analysis of the Set criteria as applied to eRINs is arbitrary, in that it does not appropriately consider each of the criteria and ignores well-known, real-world implications of the proposal. Sixteen of the potential impacts EPA identified were assessed on only a qualitative basis, with EPA calculating estimated costs for only two elements.[67] This lack of quantified data in areas such as number of electric vehicles added through the eRIN program and the amount of additional renewable fuel used in transportation, underlies EPA's application of each of the statutory criteria and results in an arbitrary justification of the program. EPA has

[65] See page 14686, https://www.govinfo.gov/content/pkg/FR-2010-03-26/pdf/2010-3851.pdf (emphasis added).
[66] See page 14885, https://www.govinfo.gov/content/pkg/FR-2010-03-26/pdf/2010-3851.pdf (emphasis added).
[67] DRIA at iv (Table ES-1).

once again put its "thumb on the scale" in applying the RFS requirements to this cellulosic biofuel subset. Below we detail some of the inadequacies of EPA's analyses of the statutory factors for eRINs. Given the brief time we have had to prepare these comments, this is not a complete list, and in some instances, additional research is needed to provide informed comments.

Environmental– EPA did not provide the same level of environmental review for eRINs as was done for the other categories. EPA did not provide lifecycle emissions analysis for electric vehicles and did not consider the supply chain of: electric vehicle manufacturing; electric vehicle battery manufacturing; battery replacements; electric vehicle infrastructure (including electric vehicle charging equipment, electric vehicle meters, additional power generation, transmission, substation and distribution equipment); more frequent tire replacement; and, additional electricity consumption from real-world electricity losses associated with BEV operation in hot and cold weather, greater charging losses for lower amperage and voltage charging equipment, electric losses across panel breakers and transformers, higher electric losses when charging batteries in a partial state-of-charge, and charging losses from electric vehicles continuing to draw power while not in use. It is vital EPA considers the emissions from battery production as this is a significant source of carbon emissions associated with electric vehicles. This level of analysis was considered for biofuel production and EPA did not explain why it did not provide this data to stakeholders. With respect to biogas fueled electricity generation facilities (EGUs) that would provide energy to these electric vehicles, EPA claims "[t]he lack of data on these many small facilities make it difficult to quantify the emission impacts of biogas EGUs."[68] EPA has not provided sufficient data surrounding the environmental impacts of eRINs. The Agency's policy conclusions in this area are thus owed no deference, as the Agency ignored real world carbon emissions associated with electric vehicle battery production and other lifecycle emissions.

Energy Security – EPA took a blanketed approach to reviewing the energy security impacts related to the proposed volumes, by doing so the Agency failed to conduct any analysis on the extent to which the proposed rule will increase U.S. dependence on foreign supply chains. As is widely known, the electric vehicle battery supply chain is dominated by China, including battery cell production, cathode and anode production, and chemical refining and production of lithium, cobalt, nickel sulphate, manganese, spherical graphite and synthetic graphite.[69] EPA's failure to consider the national security implications of this dependence does not meet the explicit statutory requirement to consider such criteria.

Expected Annual Rate of Commercial Renewable Fuel Production – EPA assumes that the eRIN revenue stream to OEMs will result in lower electric vehicle prices, increased electric vehicle

[68] DRIA at 104.

[69] *See, e.g.*, International Energy Agency, *The Role of Critical World Energy Outlook Special Report Minerals in Clean Energy Transitions*, World Energy Outlook Special Report (May 2021) at 13.

sales, and a concomitant increase in the demand for biogas electricity. As discussed above, EPA's qualitative conclusion that OEMs will use this revenue to discount electric vehicles, which in turn would increase biogas production, is speculative at best and EPA has not attempted to provide qualitative analysis of the incremental effect of this rulemaking on electric vehicle production necessary to support its conclusion that eRINs will increase renewable fuels. This stands in stark contrast to all of the other RIN programs that require extensive documentation of the amount of qualified renewable fuel produced.

Infrastructure to Deliver and Use Renewable Fuels – EPA failed to assess the additional infrastructure needs and associated costs to implement its proposed eRIN program. These costs must include additional BEV-related infrastructure, such as electric vehicle charging equipment, meters to track electric vehicle power consumption, additional power generation assets, transmission lines, additional substations, circuits, conductors, and other distribution equipment. EPA should also assess the extent to which the much heavier BEVs will damage roadways and require additional and more frequent road repairs and damage to other vehicles traversing the more damaged roads.

Cost to Consumer – EPA analyzed the eRINs' impacts on consumers but does not account for the fact the high candidate volumes for cellulosic biofuel would be met with eRINs. This would have a significant impact on consumers---this roughly $6 billion cost for eRINs would be more than a drop in the bucket. EPA estimates the consumer impact to be 1.0 cent or 1.9 cents.[70] Congress did not authorize eRINs and EPA has a duty to do more than acknowledge its creation of a new hidden liquid fuels tax. The underlying assumption that OEMs will reduce the cost of electric vehicles is unsupported, and there is ample evidence to the contrary. EPA does not provide insights on OEM pricing models to support the assumption, or examples of similar pricing schemes. EPA must quantify all the costs and benefits of this new program and explain the impact on the consumer as Congress directed. In the absence of this information, we are unable to provide informed comment on this aspect of the proposal.

Considered as a whole, the Agency neglected to provide the environmental impacts associated with eRINs in contrast to other renewable fuel categories; failed to consider energy security impacts; EPA's expected annual rate of consumption was not backed up with data to support its conclusions; infrastructure needs were not assessed; and costs to consumers were downplayed to meet policy goals. A $6 billion hidden tax on consumers of liquid fuels was never contemplated by Congress, and EPA's new policy cannot be supported through the objective application of the statutory criteria.

F. EPA's eRIN Proposal Ignores the RFS Lead Time Requirements

[70] DRIA at 505.

Putting aside the legal deficiencies of eRINs discussed above, if EPA moves forward with eRINs, it would be subject to the RFS lead time requirements.[71] The RFS unambiguously requires EPA to provide lead time "14 months before the first year for which such applicable volume will apply."[72] Since eRINs would represent an entirely new obligation within the cellulosic and total renewable volumes, EPA must adhere to the 14 months lead time requirement and may not implement eRINs prior to the 2025 compliance year. An extension of the compliance date does not adequately mitigate the harms caused by failing to provide the 14-month lead time.

Otherwise, EPA had ample opportunity to consider its approach to this rule. EPA has known since the revision of the RFS in 2007 that the statutory tables for annual RFS volumes would terminate at the end of 2022 and that the Agency must set RFS volumes on another basis for three of the four renewable fuels in 2023 and succeeding years. Given the decade and a half "lead time" that EPA was granted to address RFS obligations for 2023, it is simply not reasonable for the Agency to interpret the statute to allow it to promulgate both retroactive obligations for 2023 and obligations for 2024 that fail to comply with CAA section 211(o)(2)(B)(ii).

G. Refiners and importers of gasoline and diesel are not the appropriate obligated parties for eRINs.

EPA should not make refiners and importers of gasoline and diesel the obligated parties for eRINs and should consider either utilities or automakers as the appropriate obligated party for eRIN obligations. As fleet electrification increases, electric vehicle makers and electricity generators will increasingly contribute to carbon emissions from transportation. Congress placed renewable fuel obligations on "refineries, blenders, and importers, as appropriate"[73] and Congress allowed credits to be generated "by any person that refines, blends, or imports…"[74] It is clear by the similarity in the language Congress used that obligated parties and credit generators are intended to be the same or closely related parties. If EPA's flawed logic allows OEMs to generate RINs from electricity used in transportation, it stands to reason that OEMs or providers of electricity that are contributing to transportation emissions should incur the obligation for eRINs. As EPA has noted, obligated parties have two ways to comply, blend the fuel or purchase a RIN. If eRINs are incorporated into the program, the only option for refiners is to purchase a RIN generated by an electric vehicle manufacturer with no assurance of its validity.

H. EPA's methodology for calculating eRIN generation is flawed.

EPA proposes a drastic revision of its 2010 equivalence value estimate for renewable electricity, from 22.6 kWh/RIN to 6.5 kWh/RIN. In doing so, EPA reopens the 2010 rule and proposes to

[71] Lead time requirements are explained in greater detail in Section III.A, *supra*.
[72] 42 U.S.C.§ 7545(o)(2)(B)(ii).
[73] 42 U.S.C.§ 7545(o)(3)(B)(ii)(I).
[74] 42 U.S.C.§ 7545(o)(5)(A)(i) & 42 U.S.C.§ 7545(o)(5)(E).

increase the relative value of each kWh of renewable electricity by 350 percent. EPA did not accurately calculate the amount of renewable electricity derived from biomass that is consumed in transportation. EPA proposes a hypothetical quantity, making various assumptions regarding the use of "denatured fuel ethanol as the baseline gallon of renewable fuel", biogas cleanup, electric transmission, line losses, and charging efficiency losses. There is uncertainty inherent in each assumption that when compounded with each variable makes the overall biogas to eRIN calculation equivalent to a stab in the dark. At the same time, the obligation for refineries to obtain RINs will be calculated down to the gallon, based on actual production of gasoline and diesel, and verified in multiple reports submitted to the Agency.

EPA proposes that "instead of requiring a natural gas pipeline interconnect, a facility would only need an electrical connection".[75] This is an entirely novel eRIN methodology that ignores statutory requirements and EPA's own requirements in its 2010 rulemaking limiting credits only to the specific quantities of renewable fuel "which are actually used as a transportation fuel". It also ignores the statutory directive under EISA Section 206 that EPA shall supply a study to Congress "identifying the source of electricity used to power electric vehicles" and equates "specific quantities of electricity to renewable fuel".[76] Congress explicitly asked EPA to study and report on this issue, not to issue any rules.

In making this leap to a new proposed methodology, EPA failed to consider the combustion of any renewable biogas to supply power to the grid that requires the use of (most commonly) a reciprocating internal combustion engine with a typical efficiency of about 30 percent. Unlike the use of a pipeline to physically deliver actual volumes of renewable fuel (Btus) directly into transportation fuel, the prevailing method of converting biogas, such as landfill gas, to the electrical grid loses two-thirds of the biogas (after losing 5.6% of the biogas during gas cleanup, using EPA's assumption). EPA's proposed method, without any explanation, incorrectly credits biogas electricity for generation, transmission and charging losses. Under EPA's method to arrive at its current calculation of 6.5 kWh per RIN, EPA rewards electricity biogas for greater inefficiency in power generation. This is clearly incorrect. It would be more accurate for EPA to estimate a renewable biogas electricity equivalency closer to the following:

> *77,000 Btu (of denatured ethanol = 1 RIN, using EPA's baseline) x 1.056 (to account for EPA's own estimate of biogas cleanup losses) x 1/0.33 (to account for two-thirds fuel loss when converting biogas to electricity) x 1.053 (to account for EPA's own estimate of transmission losses) x 1.15 (to account for EPA's own estimate of charging losses) x 1/0.0025 (to account for no more than 0.25% of grid power from biogas being actually used for EV charging) / 3,412 Btu/kWh = 34,630 kWh of renewable biogas electricity per RIN.*

[75] 87 Fed. Reg. at 80,594.

[76] See page 14686, https://www.govinfo.gov/content/pkg/FR-2010-03-26/pdf/2010-3851.pdf.

EPA should require a more significant effort from automakers to validate the precise amount of electricity consumed down to the individual vehicle to be consistent with the level of stringency required of liquid biofuel producers. This is a reasonable requirement given the expected value of the eRIN market. EPA's methodology lacks the granularity and validity necessary of a multi-billion-dollar compliance scheme. Regardless, all of EPA's actions are prohibited under EISA Section 206.

A. eRINs Are Unlikely to Survive Judicial Review and Should be Severable.

EPA's approach to severability is inconsistent and unreasonable. EPA declares most of the proposal to be severable but adopts a different approach to eRINs by declaring them to be linked to the volumes for 2024 and 2025. Specifically, EPA states that:

> [W]e do not intend for the eRIN regulatory provisions (Section VIII) to be severable from the volumes for 2024 and 2025, such that if a reviewing court were to set aside the eRIN program, the volumes for 2024 and 2025 would also be set aside, as those volumes will take into account considerable volumes of cellulosic biofuel expected to be generated utilizing those regulatory provisions. [80591/1]

First, whether any final eRIN program would be severable is a matter for a reviewing court to decide. However, a better, more reasonable approach would be to remove the eRIN initiative from the volumes in the final rules. This would clearly delineate between EPA's duty to consider application of its Set criteria in CAA section 211(o)(2)(B)(ii) with respect to all compliance years covered by the proposed rule (2023 to 2025) and EPA's attempt to utilize this rulemaking to create an entirely new program to support the development of EVs.

As noted elsewhere in these comments, EPA lacks statutory authority for its eRIN proposal, which conflicts with the existing RFS requirements as well as an explicit statutory directive to have EPA study and report alternatives back to Congress for new renewable energy legislation. EPA also failed to respect the statutory, 14-month lead time requirement for the first year (i.e., 2024) in which the eRIN program would apply.

EPA could also, in this rulemaking, provide for an alternative set of RFS standards (subtracting all eRIN volumes) that would take effect if a reviewing court vacated or remanded the eRIN program. This would eliminate any further delay and uncertainty concerning the operation of the RFS program over the next 2½ years.

Another alternative, but less attractive, approach would be for EPA to announce an intent to exercise its cellulosic waiver should the court strike down the eRIN initiative. Since, in this instance, there would be no eRIN "production" EPA could waive the entire volume of eRINs that it projects to be available in 2024 and 2025 under its authority in CAA section 211(o)(7)(D). This approach, however, fails to recognize the illegality of eRINs and erodes regulatory certainty for the affected years.

EPA must not inject additional uncertainty regarding the 2024 and 2025 standards in its attempt to promote eRINs.

VI. EPA's Other Proposed Changes to the Regulations

EPA should have allowed more time for stakeholders to review the "Other Proposed Changes to the Regulations" section of the proposal, and AFPM recommends EPA bifurcate this section of the proposal and finalize separately from the 2023-2025 volume obligations, as discussed in Section II of these comments. AFPM provides feedback to the following sections and looks forward to engaging with the Agency to further discuss these and other technical changes that should be finalized as a separate regulatory action.

A. Biogas Regulatory Reform

EPA has proposed many changes that will affect the biogas and RNG industries. EPA states the proposed changes are necessary because "the current regulatory provisions for biogas to renewable CNG/LNG are not an appropriate model for the design of the proposed eRINs program."[77] The proposed changes will penalize the current participants in the biogas and RNG value chain who have developed compliance strategies and business arrangements that have resulted in the generation of the vast majority of D3 cellulosic biofuel RINs over the history of the RFS. These program participants will need to change their business models and commercial agreements to meet the requirements of the new eRIN program. Consistent with our recommendations about bifurcating the eRIN program into a separate proposal, the biogas regulatory reform provisions similarly should not be implemented as part of this rulemaking.

B. Separated Food Waste Recordkeeping Requirements

EPA should simplify and streamline the proposal related to separated food waste recordkeeping to further enable compliance and reduce the administrative burden, while assuring protections against fraud. Industry needs an immediate workable solution to this issue.

C. Definition of Produced from Renewable Biomass

EPA proposes that *produced from renewable biomass* means that the energy in the finished fuel or biointermediate must come from renewable biomass. EPA also proposes to change the definition of co-processed to a definition of co-processed fuel or co-processed intermediate to mean a fuel or intermediate that contains energy from both renewable biomass and non-renewable biomass.[78] EPA does not provide a rationale for making these changes and should not update or add these new definitions. AFPM is concerned that EPA's approach arbitrarily limits the number of RINs that may be generated from volumes of renewable diesel. EPA

[77] 87 Fed. Reg. at 80,692.
[78] 87 Fed. Reg. at 80,706.

proposes that these changes are necessary to clarify the meaning, which implies no substantive change for existing RIN generation.

EPA's proposed coprocessing definition could inappropriately classify renewable diesel or fuels that contain energy from non-qualified feedstocks (e.g., renewable diesel hydrotreated with natural gas) as a "co-processed fuel." A potential result of these inappropriate definition changes could prevent the generation of D4 RINs for volumes of renewable diesel because of the coprocessing limitation in CAA 211(o)(1)(D). This outcome is contrary to the intent of Congress as discussed in Section III C of these comments. The Agency should consider if an alternative term other than co-processed could be proposed to avoid confusion in situations where other agencies reference EPA definitions.

As EPA considers any change to the definition of "co-processed fuel" and its possible application to other federal laws, we urge the Agency to consider the past determination of the Internal Revenue Service (IRS), which permitted the use of hydrogen as a de minimis catalyst. Indeed, in its 2011 memorandum, the IRS cited the legislative history, stating that the use of hydrogen as a catalyst was "*irrelevant* for purposes of determining whether a fuel is renewable diesel."[79] Given this precedent – and the Administration's commitment to promoting renewable fuels, including renewable diesel and sustainable aviation fuel – we urge EPA to incorporate the IRS's determination into its own thinking.

D. Limiting RIN Separation Amounts

EPA proposes to limit the assignment and separation of RINs to the equivalency value of the renewable fuel. AFPM opposes the proposed approach to limit flexibilities obligated parties and renewable producers have used to manage compliance with the RFS.

E. Technical Amendments

EPA should have included in its technical amendments section of the proposal the appropriate changes needed to correct EPA's transmix regulations. AFPM supports regulatory changes to ensure refiners are not precluded from adjusting their RFS obligation to avoid double counting of transmix volumes.

VII. Conclusion

EPA should take this opportunity to set volumetric targets based on what the fuel market can realistically achieve. The RFS should remain focused on liquid transportation fuels and EPA needs to reject the inclusion of eRINs as part of the RFS program. AFPM members are actively seeking new RFS pathways for liquid fuels and feedstocks to bring the next generation of fuel technologies to market. EPA can support these efforts to reduce carbon emissions by increasing

[79] Boland, Frank. Office of Chief Counsel, Internal Revenue Service, Memorandum to Holly McCann. *Renewable Diesel Fuel*. November 4, 2011. Available at https://www.irs.gov/pub/irs-wd/1144024.pdf, Accessed Feb. 9, 2023 (emphasis added).

program certainty and stability while also reducing program costs. The approach EPA has taken in this proposal is to stifle innovation in advanced biofuels, promote first generation biofuels beyond the market's ability to absorb them, and shift overall program growth away from liquid biofuels and into the power sector. This is completely contrary to how Congress envisioned EPA's handling of the program.

Sincerely,

Patrick Kelly
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