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BY ELECTRONIC MAIL AND CERTIFIED MAIL

Hon. Andrew R. Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Hon. Anne Idsal
Acting Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Renewable Fuel Program: Standards for 2020 and Biomass-Based Diesel Volume for 2021, Response to the Remand of the 2016 Standards, and Other Changes (EPA-HQ-OAR-2019-0136-0021)

Dear Administrator Wheeler,

Five years ago this month, the U.S. Environmental Protection Agency (EPA) approved renewable electricity from certain feedstocks as a fully authorized pathway under the Renewable Fuel Standard (RFS) (“electricity pathway”). As a result of the Agency’s granting of that petition, companies able to comply with the requirements of the electricity pathway immediately submitted registration requests. Thereafter, EPA undertook annual volume obligation rulemakings in 2015, 2016, 2017, 2018, and 2019. Each year, EPA considered what the RFS refers to as the “projected volume” of cellulosic biofuels. Each year, EPA failed to include any electricity in its projected volumes, despite available data from the U.S. Energy Information Agency (EIA) showing hundreds of millions of gallons of fuel, measured in gasoline gallon equivalents, derived from qualified electricity. Not surprisingly, the proposed 2020 Renewable Volume Obligation (RVO) is no different, as the Agency has again ignored an entire industry that produces enough transportation fuel to equal the entire projected volume of all other cellulosic fuels found in the proposed 2020 RVO.

The RFS Power Coalition represents trade associations and companies that utilize renewable biomass and the biogenically derived portion of municipal solid waste to produce electricity recognized by the RFS. As demonstrated below, EPA’s refusal to include fuels from this sector—and its failure to process qualified feedstocks through pathway petitions—is contrary to the plain language of the RFS,

EPA’s own regulations and its methodology for how annual volume obligations are calculated. We show herein that the electricity pathway is a final rule, duly adopted in accordance with the Administrative Procedures Act, and EPA’s decision not to process registration requests or process pathways—some pending before the Agency for more than four years—is not an adequate legal basis for ignoring production volumes.

Using readily available data on both the production and consumption of qualified electricity, we provide the Agency with information that supports the inclusion of additional RINs that have gone missing in the proposed 2020 RVO. Not only are EPA’s cellulosic numbers flawed, but the Agency makes a number of materially significant misstatements of fact and law regarding the cellulosic category. We catalogue such misstatements below.

EPA’s oversight is problematic, not just because of EPA’s failures to follow its own rules in calculating annual volumes, but also because of the demonstrable, economic harm that results any time the federal government ignores the free market by favoring one form of energy over another. We show that, by refusing to include production volumes from qualified electricity, EPA achieves exactly the opposite result of your stated goals of allowing free markets to decide winners and losers. Administrator Wheeler, you explained in a March 6, 2019 interview with S&P Global, “I don’t think it’s EPA’s job to pick what type of fuel we use” and expressed your concern that the government not “tip the scales” in favor of certain technologies. You correctly noted, “I think it’s the government’s responsibility to level the playing field and make sure that people are competing in a free market system.” By denying qualified electricity producers access to the RFS, while awarding RINs to other fuels derived from the same feedstocks, the result is that certain producers are receiving *nine times* the value of their product while electricity producers—without access to the same benefits—have seen 21 biomass facilities closed in eight states, resulting in thousands of job losses across rural America. Among biomass power producers alone, at least 322 direct jobs and 1,155 indirect jobs have been lost to plant closures since July 2014 when the electricity pathway was originally approved by the EPA, with another 75 direct jobs and 150 indirect jobs currently at risk. Biomass facility closures have resulted in a cumulative \$78 million lost every year to rural communities where the plants were located. Many of these plants were the largest or second largest taxpayers in their communities – a staggering loss to local governments across the country. Additionally, at least eight waste-to-energy facilities have shut down across the country since July 2014. This is hardly a “level playing field.”

Finally, we show that, because EPA utilizes a flawed cellulosic production estimate for 2020 in calculating all other biofuel volumes, the entire 2020 RFS becomes a “house of cards” in danger of collapse and even more so for every year that EPA ignores fuels represented by hundreds of millions of RINs.

1. The Renewable Fuel Obligation

We begin by reviewing the legal basis for EPA’s proposed rule, found in Section 211 of the Clean Air Act. In accordance with 42 USC § 7545(o)(3)(B)(i)-(ii), EPA has the responsibility to promulgate rules informing obligated parties (refiners and importers) of the annual renewable fuel obligations. To do so, EPA must first determine the annual volume requirement—also known as the

“applicable volume”—for each category of renewable fuels. See § 7545(o)(2)(B). These annual volume requirements represent the total volume of renewable fuel that must be sold or introduced into the nation’s transportation fuel supply in a given year. See *Monroe Energy, LLC v EPA*, 750 F.3d 909, 912 (D.C.Cir.2014). The statute contains tables that set forth the annual volume requirements for each category of renewable fuel. 42 U.S.C. § 7545(o)(2)(B)(i). The ranges of years covered by the tables differ depending on the fuel type. For those years not covered by the statutory tables, EPA must calculate the annual volume requirements in the first instance. § 7545(o)(2)(B)(ii). The statute requires EPA to determine those volume requirements “in coordination with the Secretary of Energy and the Secretary of Agriculture, based on a review of the implementation of the program” as well as an analysis of several factors identified by statute. *Id.* EPA must promulgate the volume requirements it establishes for years not covered by the statutory tables “no later than 14 months before the first year” in which the volume requirements will apply. *Id.* Of particular relevance here, EPA must determine the “projected volume” of cellulosic biofuel that will be produced in a given compliance year. § 7545(o)(7)(D)(i) (when “the projected volume of cellulosic biofuel” fails to meet the statutory minimum, “the Administrator shall reduce the applicable volume...to the projected volume available during that calendar year.”). If EPA’s projection falls short of the statutory volume requirement for cellulosic biofuel, EPA has no discretion—it “shall reduce” the cellulosic biofuel statutory volume requirement to EPA’s volume projection. *Id.* A reduction to the cellulosic biofuel volume requirement triggers the “cellulosic waiver provision.” § 7545(o)(7). Under that provision, when EPA must reduce the cellulosic biofuel volume requirement due to its volume projections for cellulosic biofuel, the agency “may also reduce” the advanced biofuel and total renewable fuel volume requirements “by the same or a lesser volume” as the cellulosic biofuel reduction. § 7545(o)(7)(D)(i).

After EPA determines the volume requirements for the various categories of renewable fuel, it has a “statutory mandate” to “ensure[]” that those requirements are met. § 7545(o)(3)(B)(i); *Monroe Energy* at 920. EPA fulfills that mandate by translating the annual volume requirements into “percentage standards.” The percentage standards inform each obligated party of how much renewable fuel it must introduce into commerce based on the volumes of fossil-based gasoline or diesel it imports or produces. *Monroe Energy* at 912. The percentage standards represent the percentage of transportation fuel introduced into commerce that must consist of renewable fuel. If each obligated party meets the required percentage standards, then the Nation’s overall supply of cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuel will meet the total volume requirements set by EPA.

2. The Proposed 2020 Renewable Volume Obligation

Applying the above requirements, EPA proposes, in Table I-1, the following volume requirements:

Proposed and Final Renewable Fuel Volume Requirements for 2019–2021

	2019 Final	2020 Statutory Volumes	2020 Proposed Volumes	2021 Proposed Volumes
Cellulosic biofuel (billion gallons)	0.42	10.50	0.54	n/a
Biomass-based diesel (billion gallons)	2.1	≥1.0	N/A ^c	2.43
Advanced biofuel (billion gallons)	4.92	15.00	5.04	n/a
Renewable fuel (billion gallons)	19.92	30.00	20.04	n/a
Notes: ^c All values are ethanol-equivalent on an energy content basis, except for BBD which is biodiesel-equivalent.				

For purposes of this submission, we limit our analysis to EPA’s calculation of the proposed cellulosic biofuel production number, and the basis for that estimate.

EPA is proposing to invoke its cellulosic waiver authority because the Agency “do[es] not believe that the statutory volumes can be achieved...” 84 Fed. Reg. 36762, 36766 (July 29, 2019). The basis for that belief is the Agency’s assertion that the cellulosic volume” is no greater than 540 million gallons. *Id.* at 36777. Accordingly, the 540 million gallon estimate is used to invoke the waiver authority and to set the proposed 2020 volume obligations.

EPA notes that it has “consistently interpreted the term ‘projected volume of cellulosic biofuel production’ in CAA Section 211(o)(7)(D)(i) to include volumes of cellulosic biofuel likely to be made available in the United States, including both domestic production and imports.” *Id.* at 36769, n. 26. To arrive at this projected volume, EPA explains that it “considered the accuracy of the methodologies used to project cellulosic biofuel production in previous years, data reported to EPA through EMTS, and information we collected through meetings with representatives of facilities that have produced or have the potential to produce qualifying volumes of cellulosic biofuel in 2020.” *Id.* at 36769. Importantly, it limited its analysis to what the Agency called “two main elements to the cellulosic biofuel production projection: liquid cellulosic biofuel and CNG/LNG derived from biogas.” *Id.* at 36769. Percentile values were adjusted to accommodate growth rates. EPA did not limit its analysis of “projected volume of cellulosic biofuel production” to only facilities registered in the EMTS. As EPA made clear,

In order to project cellulosic biofuel production for 2020 we have tracked the progress of a number of potential cellulosic biofuel production facilities, located both in the U.S. and in foreign countries. We considered a number of factors, including information from EMTS, the registration status of potential biofuel production facilities as cellulosic biofuel producers in the RFS program, publicly available information (including press releases and news reports), and information provided by representatives of potential cellulosic

biofuel producers...Both in our discussions with representatives of individual companies and as part of our internal evaluation process we gathered and analyzed information including, but not limited to, the funding status of these facilities, current status of the production technologies, anticipated construction and production ramp-up periods, facility registration status, and annual fuel production and RIN generation targets.

Id. at 36770. In the proposed rule, there is no mention of approved cellulosic pathways other than liquid fuels and renewable CNG/LNG.

3. Renewable Electricity from Qualified Feedstocks is a Valid Pathway that Constitutes “Cellulosic Biofuel Production” under Section 211(o)(7)(D)(i).

Congress created the RFS in 2005 to promote the production of renewable transportation fuels. See *Energy Policy Act of 2005* § 1501, Pub. L. 109–58 (Aug. 8, 2005) (“EPAAct”), codified at Clean Air Act § 112(o), 42 U.S.C. § 7545(o). In order to administer the renewable fuel program, Congress expressly directed EPA to create a program to credit the renewable biomass content of transportation fuel. See *Clean Air Act* § 112(o)(5), 42 U.S.C. § 7545(o)(5)¹; *Americans for Clean Energy v. EPA*, 864 F.3d 691, 699 (D.C. Cir. 2017) (Kavanaugh, J.) (“Congress directed EPA to establish a ‘credit program’ through which obligated parties can acquire and trade credits”).

Although the 2005 renewable fuel program initially focused primarily on corn ethanol, Congress and President Bush amended and expanded the program in the 2007 Energy Independence and Security Act (“EISA”) to include all types of transportation fuel, with the express goal “to move the United States toward greater energy independence and security [and] to **increase the production of clean renewable fuels.**” See *Energy Independence and Security Act*, Pub. L. 110-140 (Dec. 19, 2007) (preamble) (emphasis added); *Americans for Clean Energy*, 864 F.3d at 697 (Kavanaugh, J.) (emphasizing focus on production of renewable fuels). In EISA, Congress broadened the definition of “renewable fuel” to include any form of renewable fuel “produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel.”

Pursuant to Congress’ mandate to implement the Renewable Fuel Program, EPA initially promulgated regulations implementing the original RFS1 program in 2007. See *Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program*, 72 Fed. Reg. 23,900 (May 1, 2007) (“RFS1 Final Rule”). Because Congress later that same year amended the RFS1 program, EPA appropriately finalized new regulations in 2010 establishing renewable fuel obligations for obligated parties under the expanded RFS2 program created by EISA. Acknowledging the expanded definition of renewable fuel mandated by EISA, EPA recognized in the 2010 Rule that electricity and renewable natural gas derived from renewable biomass that displaced fossil fuels as transportation fuel must be credited under the RIN system on a similar footing as other transportation fuels, as long as such electricity or natural gas was generated from feedstocks that met the statutory definition of renewable biomass. See 75 Fed. Reg. 14,669, 14,686 (Mar. 26, 2010) (“we are allowing fuel producers, importers and end users to include

¹ See EPAAct § 1501 (“(5) CREDIT PROGRAM.—(A) IN GENERAL.—The regulations promulgated under paragraph (2)(A) shall provide—(i) for the generation of an appropriate amount of credits by any person that refines, blends, or imports gasoline that contains a quantity of renewable fuel that is greater than the quantity required under paragraph (2)”).

electricity, natural gas, and propane made from renewable biomass as a RIN-generating renewable fuel in RFS”); *see also Id.* at 14,711 (“the generation of RINs also requires as a prerequisite that the feedstocks used to make the renewable fuel meet the definition of ‘renewable biomass’”). Notwithstanding this finding, EPA failed to include electricity as a valid pathway in the original Table 1 to Section 80.1426. For that reason, a petition was filed, in accordance with Section 80.1416, seeking designation of “renewable electricity” as a valid transportation fuel, and using biogas from waste digesters as the approved feedstock. See <https://www.epa.gov/renewable-fuel-standard-program/approved-pathways-renewable-fuel>. That petition was granted in 2014 and incorporated in EPA’s *Regulation of Fuels and Fuel Additives: RFS Pathways II, and Technical Amendments to the RFS Standards and E15 Misfueling Mitigation Requirements*. See *Pathways II Rule* 79 Fed. Reg. 42128 (July 18, 2014).

In the Pathways II Rule, the Agency announced that it was “expanding the renewable electricity pathway to include biogas from landfills, wastewater treatment from digestors, agricultural digestors, segregated MSW digestors, and waste digestors.” *Id.* at 42137. EPA also finalized rules regarding registration and RIN generation; distribution and tracking; and matching. On the question of who the producer is, EPA concluded that it would “examine registrations on a case by case basis in the short term, and to learn from this experience prior to issuing any final rule addressing the subject.” *Id.* at 42144. On the question of whether biogas from electricity met the 60% threshold reduction in greenhouse gas emissions to qualify as a cellulosic fuel, EPA specifically found that “accounting for the improved efficiency of EV drivetrains,” the GHG emissions are reduced by 96%. *Id.* at 42142.

In 2015 and 2016, EPA received numerous requests for registrations of facilities in accordance with the Pathways II Rule. To our knowledge, no facility was ever informed that its filing was not in compliance with the requirements of the rule. None of the facilities seeking registration has been registered. For qualified feedstocks not addressed in the Pathways II Rule, such as woody biomass and the biogenic portion of separated municipal solid waste, EPA informed potential producers that such feedstocks would likely qualify, noting that “EPA is currently reviewing the comments received and has not yet determined how it will resolve the issues for which public comment was sought. During the interim, parties may submit new pathway petitions and registration applications for renewable electricity RINs and EPA will evaluate them as appropriate in light of its decision-making process on these matters.” (See, for example, EPA Fuel Program Support response to Plainfield Renewable Energy, 4/26/2018.)

In 2016, EPA solicited public comment on the RIN issuance rules after receiving registration requests from various entities in the biofuel supply chain (other than fuel producers) who were seeking to capture the value of RINs under the Renewable Fuel Program. See *Renewables Enhancement and Growth Support Rule; Proposed Rule*, 81 Fed. Reg. 80,828, 80,831 (Nov. 16, 2016) (“2016 Proposal”) (“The EPA has received a number of registration requests for approval under the existing RFS regulations and these requests envision generation of RINs by different types of entities in the renewable electricity production, distribution or use sectors . . . EPA seeks input on the approach to RIN generation for renewable electricity that would best further the goals of the RFS program, but does not propose a preferred approach.”). EPA also noted that various entities competing for RINs were submitting different data, which purportedly complicated EPA’s review of RIN registrations. See *Id.* at 80,891 (“This has created an untenable environment for the approval of any single registration request by the EPA to date. Many of the registration requests submitted envision generating RINs using different types

of information to verify the use of electricity as transportation fuel.”). In the end, however, no amendment to the Pathways II Rule was ever finalized (or even proposed). Accordingly, the Pathways II Rule remains the operative, legally binding regulation.^{2,3}

Finally, in 2018 various pathway requests were submitted to the Agency regarding already approved feedstocks when used for generating qualified electricity. None of those pathway requests has been acted upon. In fact, EPA informed one applicant for such a pathway that the Agency had no intention of acting within the next 12 months.

In summary, EPA’s failure to process registration requests and complete the review of additional electricity pathways does not change the simple fact that renewable electricity is a valid pathway.

4. Renewable Electricity Listed in Table 1 to 80.1426 is a Valid Pathway and EPA is Legally Required to Include Qualified Production of Renewable Electricity.

In the 2012 Final RVO, EPA applied a methodology for calculating the potential for “electricity generated from renewable biomass that is used as a transportation fuel” that is directly relevant to how the Agency can and should include electricity in the 2020 RVO. 77 Fed. Reg. 1319, 1333 (Jan. 9, 2012). Specifically, in the 2012 Final Rule, the Agency relied upon EIA’s Annual Energy Outlook (AEO) for 2011 to calculate the annual use of electricity as transportation fuel based on the number of BTUs and a conversion of 1 megawatt hour equivalent to 3.41 million BTUs. *Id.* n. 17 Using this same methodology from the 2012 RVO, we assert that EPA must recognize the following volumes in the 2020 RVO:

² To the extent EPA takes the position that the 2016 REGs rule somehow amends the 2014 Pathways II Rule, there is no legal basis to make that claim. Where EPA wishes to change or delay a regulation, the Clean Air Act requires EPA to follow detailed rulemaking procedures, and an agency rule cannot be finalized without adherence to these procedures. *See* Clean Air Act § 307(d), 42 U.S.C. § 7607(d). To the extent that EPA is withholding action on RIN registrations on the basis of the 2016 solicitation of public comment or any other purported agency action, this constitutes an illegal change to the existing RFS regulations without notice-and-comment rulemaking. The Clean Air Act requires that all final rules be promulgated with a statement of basis and purpose and explanation of reason, and published in the *Federal Register*.³ None of those procedures, nor substantive rulemaking requirements, have been satisfied with respect to EPA’s apparent decision to not acknowledge generation of RINs by producers of electricity derived from renewable biomass, including EPA’s inaction on registrations specifically for biogas derived electricity where EPA has finalized a valid pathway.

³ *See* Clean Air Act § 307(d)(1), 42 U.S.C. § 7607(d)(1) (“RULEMAKING (1) This subsection applies to . . . (E) the promulgation or revision of any regulation pertaining to any fuel or fuel additive under section 7545 of this title”); (d)(6) (“(6)(A) The promulgated rule shall be accompanied by (i) a statement of basis and purpose like that referred to in paragraph (3) with respect to a proposed rule and (ii) an explanation of the reasons for any major changes in the promulgated rule from the proposed rule. (B) The promulgated rule shall also be accompanied by a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations during the comment period. (C) The promulgated rule may not be based (in part or whole) on any information or data which has not been placed in the docket as of the date of such promulgation.”).

2020 RVO	
69,000,000,000,000	Total EV Transport Energy Use (BTUs)
21,974,522,293	Total kWh
14,979,600,000	Total kWh of approved electricity pathway fuel*
662,814,159	Total Electric GGEs / RINs ** (22.6 conversion)

* Based on 1,900 MW available from biogas according to the 2014 Rule, multiplied by 1,000 to convert to kW, multiplied by 8,760 to account for the number of hours in a year, multiplied by .9 (representing a 90% capacity factor)

** This number based only on available biogas. The entire 21 billion kWh cited in line 2 of the chart could be available for RIN credits if EPA processed pathway requests for all qualified renewable electricity sources in a timely fashion.

Several points are worthy of emphasis regarding the above chart.

First, it is interesting to note that in 2012, EPA would have included renewable electricity *had it been a valid pathway*. *Id.* at 1333 (“Currently, there are no valid pathways in Table 1 to 80.1426 for the generation of RINs representing electricity used as transportation fuel”). We now know that there is a “valid pathway.”

Second, there can be no doubt that there is available to the Agency adequate data supporting the claim that RINs could be generated in 2020 based on *current* production of qualified transportation fuel. This power is currently being produced, delivered to utility grids and, per EIA, being consumed for transportation fuel. The fact that electricity is not physically delivered to end-users is no different than common carrier renewable natural gas delivered to a common carrier pipeline and matched with end-users per the requirements of the 2014 Pathways II Rule.

Third, there is no dispute that the consumption of electricity for transportation is appropriately based on EIA’s 2019 AEO, just like EPA relied on the 2011 AEO in 2012.

Fourth, while the 22.6 conversion factor⁴ yielding 662,814,159 gasoline-gallon equivalents of fuel is in accordance with 80.1415, we assert that the resulting volume is on the low end of the range.

⁴ The equivalence value for electricity is a mathematical conversion factor which under the Clean Air Act must reflect "the degree to which the renewable fuel supplants the petroleum content of fuel used in a motor vehicle." See *Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program; Proposed Rule* 71 Fed. Reg. 55551, 55571 (Sept. 22, 2006); *Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program; Final Rule* 72 Fed. Reg. 23900, 23920 (May 1, 2007) (the equivalence value "accounts for the amount of petroleum in motor vehicle fuel that is reduced or replaced by that renewable fuel in comparison to ethanol"); RFS2; *Final Rule*, 75 Fed. Reg. 14669, 14710 (Mar. 26, 2010) (equivalence value reflects the "ability of those [renewable] fuels to power vehicles and engines, and displace fossil fuel-based gasoline or diesel). As noted by EPA in 2007: (cont'd in footnote on following page)

That is because while 22.6 is the conversion factor in the 2010 Final Rule, it is no longer the number used by EPA nor is the number consistent with the RFS and implementing regulations.

Finally, if EPA had included *all* renewable biomass feedstocks in the 2014 Rule, the existing approved pathway for electricity—currently limited to biogas—would have included woody biomass and the biogenic portion of municipal solid waste. By failing to include such feedstocks in the pathway, and subsequently failing to process pathway petitions, the Agency is further reducing the supply of cellulosic biofuel in contravention to the RFS.

In summary, using (1) EPA's updated equivalence value of 7.53; (2) EPA's 2014 estimate of biogas electricity not even counting either woody biomass or the biogenic portion of MSW; and (3) EIA data and methodology as relied upon by EPA in 2012, there is qualified electricity equal to 1.9 billion ethanol-gallons that will be generated using cellulosic feedstocks and consumed as transportation fuel, and the 2020 RVO should include the same number of RINs.

5. The Proposed 2020 Rule Includes Material Misstatements of Fact and Law.

Because EPA fails to include any transportation fuels from electricity, there are numerous material misstatements of fact and law in the proposed 2020 RVO, as follows:

In order to project the volume of cellulosic biofuel production in 2020, we considered the accuracy of the methodologies used to project cellulosic biofuel production in previous years, data reported to EPA through EMTS, and information we collected

⁴(cont'd.) *Fossil fuels such as gasoline or diesel are only replaced or reduced to the degree that the energy they contain is replaced or reduced. We do not believe it would be appropriate to treat a renewable fuel with very low volumetric energy content as being equivalent to a renewable fuel with very high volumetric energy content, since the impact on motor vehicle fossil fuel use is very different for these two renewable fuels. The use of Equivalence Values based on volumetric energy content helps to achieve this goal.*

72 Fed. Reg. 23900, 23920 (May 1, 2007). EPA has a statutory duty to apply the correct equivalence value when projecting available renewable fuel supplies. Congress required EPA to identify "alternatives for . . . equating specific quantities of electricity of renewable fuel under section 211(o) of the Clean Air Act." See *Energy Independence and Security Act of 2007*, Pub. L. 110-140. In the 2007 Act, Congress directed EPA to study "the use of electricity as a means of powering electric vehicles." *Id.* Rather than complete a separate study, EPA included electricity as a qualified renewable fuel in its 2010 Renewable Fuel Standard rule and noted the equivalence value for equating electricity and ethanol. See 75 Fed. Reg. 14669, 14869 (Mar. 26, 2010) (EPA states: "A gallon of renewable fuel represents 22.6 kW-hr of electricity, and electricity shall have an equivalence value of 1.0"); see also EPA FOIA Response, Request No. EPA HQ2016003334 (Mar. 3, 2016) ("There was no study carried out because EPA put in place a mechanism for credit generation in the March 26, 2010 final rule."). However, because the statute requires a comparison of the power supplied to a vehicle by fossil fuels (e.g., gasoline) with the power supplied by electricity (not merely a comparison of electricity energy content with ethanol as discussed in the 2010 Rule), in its 2014 Rule establishing a pathway for electricity derived from biogas, EPA acknowledged that for an apples-to-apples comparison of fossil fuels and electricity, a subsequent step in the conversion formula was needed to account for the greater mechanical efficiency of electric motors—accordingly EPA used an equivalence value of 7.53. See Air and Radiation Docket EPA-HQ-OAR-2012-0401 FROM: EPA Office of Transportation and Air Quality, July 1, 2014 "Support for Classification of Biofuel Produced from Waste Derived Biogas as Cellulosic Biofuel and Summary of Lifecycle Analysis Assumptions and Calculations for Biofuel Produced from Waste Derived Biogas" at 15 ("It would take roughly three times the amount of energy from liquid fuel to drive a conventional vehicle a given distance compared to an EV [electric vehicle] powered by electricity").

through meetings with representatives of facilities that have produced or have the potential to produce qualifying volumes of cellulosic biofuel in 2020. EIA's projection of cellulosic biofuel production in 2020, which is not yet available at the time of this proposed rule, will also inform our projection of cellulosic biofuel production in the final rule.

84 Fed Reg. 36762, 36769 (July 29, 2019). This statement is incorrect. Renewable electricity from qualified feedstocks is both “produced” and/or has “the potential to produce qualifying volumes of cellulosic biofuel in 2020.” To our knowledge no EPA representative attempting to gather data for the 2020 RVO has ever met with or contacted “representatives of facilities that have produced or have the potential to produce qualifying volumes” of qualifying fuel from electricity in the past 12 months.

There are two main elements to the cellulosic biofuel production projection: liquid cellulosic biofuel and CNG/LNG derived from biogas.

Id. Applying EPA’s own definition of “projected volume of cellulosic biofuel production” as “volumes of cellulosic biofuel likely to be made available in the U.S.,” it is incorrect to exclude electricity from this definition. The fact that EPA’s refusal to register electricity facilities has resulted in no production of registered volumes of biofuel production is not legally relevant. The Agency itself acknowledges throughout the proposed rules (and in prior annual RVOs) that it will include projected production not just from registered facilities but also from anticipated registrations in the future. *Id.* at 36770 (EPA discusses the many factors that are considered when making projection estimates: “Both in our discussions with representatives of individual companies and as part of our internal evaluation process we gathered and analyzed information including, but not limited to, the funding status of these facilities, current status of the production technologies, anticipated construction and production ramp-up periods, facility registration status, and annual fuel production and RIN generation targets”). EPA cannot possibly assert that only volumes from registered facilities will be considered when, in fact, it has undertaken an “industry-wide approach” using “year-over-year growth rates” and specifically acknowledging that not all producers considered in EPA’s assessment are even registered. *Id.* at 36769. It is telling that EPA uses the word “production” and not “registration” in Table III.B.4-1. *Id.* at 36770. The reason is that production, and not registration, is the operative criteria for meeting the statutory obligations of the RFS.

Moreover, nothing in the RFS gives EPA the right to limit its assessment of “projected volume” to facilities registered to produce “projected volume.” The idea that EPA can limit projected volumes by electing not to process registrations, and therefore not count such volumes, is as legally flawed as EPA’s assertion, in *Americans for Clean Energy v. EPA*, that EPA can claim “inadequate domestic supply” by stating that demand is not present for additional volumes of biofuels. (D.C. Circ. July 28, 2017). The D.C. Circuit’s rejection of such an approach is worth repeating:

The central problem with EPA’s “supply equals demand” argument (in addition to the text of the statute, of course) is that it runs contrary to how the Renewable Fuel Program is

supposed to work. By setting annual renewable fuel volume requirements that increase progressively each year, Congress adopted a “market forcing policy” intended to “overcome constraints in the market” by creating “demand pressure to increase consumption” of renewable fuels. Final Rule, 80 Fed. Reg. at 77,423; *Monroe Energy*, 750 F.3d at 917 (internal quotation marks omitted). Therefore, as EPA recognized in a previous rulemaking, demand for renewable fuel “will be a function of the” renewable fuel standards “set” by EPA. Regulation of Fuels and Fuel Additives: 2011 Renewable Fuel Standards, 75 Fed. Reg. 76,790, 76,803 (Dec. 9, 2010). In other words, the Renewable Fuel Program’s increasing requirements are designed to force the market to create ways to produce and use greater and greater volumes of renewable fuel each year. EPA’s interpretation of the “inadequate domestic supply” provision flouts that statutory design: Instead of the statute’s volume requirements forcing demand up, the lack of demand allows EPA to bring the volume requirements down. “No argument” that EPA has “offered here supports that goal defying (much less that text-defying) statutory construction.” *Advocate Health Care Network v. Stapleton*, 137 S. Ct. 1652, 1662, slip op. at 14 (2017).

EPA has already determined that electricity from renewable biomass is a “renewable fuel” with a valid pathway under the RFS. The Agency’s refusal to register and therefore not count volumes of transportation fuel that meet the requirements of the 2014 Rule is patently unlawful.

Certification “that this action will not have a significant economic impact on a substantial number of small entities under the “Regulatory Flexibility Act.”

EPA provides no factual basis for this conclusion in terms of the impacts of the proposed rule on all producers for a valid pathway fuel which is being excluded from the 2020 RVO.

Among our three organizations, there are many companies that currently produce pathway-approved electricity or intend to petition EPA for such a pathway. Each of these companies meets the definition of a “small entity” under the Regulatory Flexibility Act (RFA).

EPA fails to acknowledge, discuss or explain how a federal program, by the Agency’s own admission, offers “approximately 9 times the value of the fuel in 2018” while simultaneously denying such benefits to other qualified and approved technologies. In making its certification under the RFA, the Agency is required to consider information on the economic harm caused to our sector since EPA’s adoption of the 2014 Rule that EPA fails to make available to us.

6. EPA’s Flawed Cellulosic Volume Projection Creates a Precariously Constructed “House of Cards.”

As EPA notes in the Proposed 2020 RVO, when EPA determines that the projected volume of cellulosic biofuel production for a given year is less than the applicable volume specified in the statute, then EPA must reduce the applicable volume required to the projected production volume for that calendar year. Because EPA overlooked qualified electricity, there is no factual basis to make this cellulosic waiver determination. To make matters worse, EPA’s oversight of electricity means that *all* categories of biofuel volumes are flawed. That is because, by statute, when EPA

declares a cellulosic waiver it “may also reduce” the advanced biofuel and total renewable fuel volume requirements “by the same or a lesser volume” as the cellulosic biofuel reduction. As noted by EPA, the Agency has used the cellulosic waiver authority “to lower the cellulosic biofuel, advanced biofuel and total renewable volumes every year since 2014” including the proposal for 2020.

For each year since 2014, including the proposed 2020 volumes, EPA used a flawed cellulosic waiver volume in setting all other categories. To compound this problem, the Agency continues to ignore, year after year, volumes of production that should be counted. For 2020, the number is at least 662 million, and for 2021 (and assuming pathways are approved, which they must), using the same EIA data, it is over one billion. At some point, EPA will be required to account for this fundamentally flawed program.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert E. Cleaves IV".

Robert E. Cleaves IV
President & CEO
Biomass Power Association
On behalf of the RFS Power Coalition

cc: (by electronic mail)

Byron Bunker, Director, Compliance Division, Office of Transportation and Air Quality