









August 31, 2017

Via Electronic Transmission: regulations.gov

The Honorable Scott Pruitt, Administrator United States Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington DC 20460

Re: ID No. EPA-HQ-OAR-2017-0091-0002

Renewable Fuel Standard Program: Standards for 2018

Dear Administrator Pruitt:

The organizations signed to this letter represent the full value chain of biogas-derived cellulosic biofuel as regulated under the Renewable Fuel Standard (RFS). We thank the U.S. Environmental Protection Agency (EPA) for the opportunity to comment on the *Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019 (Proposed Rule)*. Given the scope of our respective representations we will limit our comments to issues impacting gaseous cellulosic biofuels.

I. ABOUT US

The Coalition for Renewable Natural Gas (RNG Coalition) is a non-profit association of companies and organizations dedicated to the advancement of RNG as a clean, green, alternative and domestic energy and fuel resource.

NGV America (NGVA) is a not-for-profit organization dedicated to the development of a growing, profitable, and sustainable market for vehicles powered by natural gas or biomethane

Energy Vision (EV) is a not-for-profit think tank whose mission is to research, analyze and promote the technologies and strategies – viable today – required to transition toward a sustainable energy and transportation future. Since 2010, EV has been the leading independent environmental organization looking at the production and use of renewable natural gas (RNG) as a transportation fuel.

The National Waste and Recycling Association (NWRA) is a not-for-profit trade association representing private solid waste and recycling collection, processing, and management companies that operate in all fifty states.

The Solid Waste Association of North America (SWANA) is a not-for-profit professional association in the solid waste management field with more than 9,000 members from both the private and public sectors across North America.

II. COMMENTS ON PROPOSED RULE

Renewable Natural Gas companies and many public entities are making major investments in communities throughout America. We are answering the call from Congress, the President, and EPA to develop American fuel, create American jobs, promote clean air, and support U.S. energy security. The Renewable Fuel Standard plays an important role in the realization of each of these policy priorities by setting the rules of the fuels market, especially as it relates to biofuels that help diversify America's fuel portfolio.

A review of historic fuel pricing data is a testament to the cost-effective fuel diversification achieved during the RFS program. In particular, we note that in August of 2005, when RFS I was adopted, biofuel sales as a percentage of total fuel sales was 2.8% in the United States and gasoline sold for an average price of \$1.96 per gallon while diesel averaged \$1.72 per gallon. By December of 2007, after RFS II was passed, biofuel sales had grown to 5.3% of U.S. fuel supply and the average price per gallon for gasoline was \$2.36 and \$2.60 for diesel. By May of 2017, biofuel sales had grown to 9.4% of U.S. fuel supply and the average price per gallon of gasoline had fallen to \$1.67 per gallon while diesel sold for an average price of \$1.55 per gallon. America has achieved greater energy security and independence while *lowering* the price of gasoline and diesel during the RFS era.

Advanced and cellulosic biofuels are poised to drive the next wave of American economic strength and prosperity. However, our ability to succeed will depend on EPA's diligent administration of the RFS.

In the Draft 2018 Renewable Volume Obligation (RVO) EPA proposes a 2018 cellulosic biofuel obligation of 238 million ethanol-gallon-equivalents (hereafter, gallons or EGE). This number represents a decrease of 73 million gallons from the 2017 requirement of 311 million gallons and negligible growth versus the 230-million-gallon standard for 2016.

The proposed 2018 RVO is problematic because it understates the volume of available fuel by (a) excluding data from operational facilities that will commence generating D-3 RINS as soon as the EPA approves their registration and (b) not considering current industry activities, like new project construction by experienced developers deploying proven technologies. While the draft rule claims consideration of various market factors, the proposed Rate-of-Growth methodology uses only historic *EPA Moderated Transaction System* (EMTS) RIN generation data, which is insufficient to calculate current production levels and estimate future production levels.

We support the use of historic data. However, historic data and trends alone are insufficient to project the volume of cellulosic biofuel that could be provided in future years. The current proposal risks a highly inaccurate annual RVO, which will result in market destabilization costing jobs, harming local economies, reducing the value of existing investments in cellulosic biofuel production, and risking the future of America's cellulosic biofuel industries.

We recognize that EPA's proposed change is responsive to concerns about data transparency and accuracy. To address those concerns, we have delivered 69 signed affidavits on the record to EPA from renewable natural gas (RNG) projects with anticipated 2018 volume. These affidavits identify each project's current operational status and fuel production volumes.

In the most transparent and comprehensive table of RFS-related, RNG industry data ever published, the raw data demonstrates anticipated industry growth from 252.25 Million gallons in 2017 to 417.22 Million gallons in 2018. As will be outlined in greater detail below, even if the EPA discounts data supporting volumes from projects under construction (and for which affidavits have been submitted) by 50%, the data supports a minimum 345.78 Million-gallon cellulosic biofuel RVO in 2018.

We ask EPA to adopt a more robust methodology that accounts for a wider set of objective, current and historical market data, including data from construction and development-in-progress, investments made, and pathway applications submitted, and to establish the final 2018 RVO at a minimum of 345.78 Million gallons.

Table 1

Renewable Natural Gas D3 Facilities	Number of Projects	2017 Volume (Million EGE)	2018 Volume (Million EGE)
Registered D3 Facilities	44	240.52	266.13
Operational D3 Facilities, Pending Registration Approval by EPA	8	8.19	26.75
Commercial-Scale D3 Facilities, Under Construction	19	3.54	108
Commercial-Scale D3 Facilities, Substantial Development	5	0	16.34
TOTAL	76	252.25	417.22

¹ See Proposed Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019, 84 Fed. Reg. 34206, 34220 (July 21, 2017), as EPA makes this same point as to Biodiesel and Renewable Diesel.

Consistent with prior practice, and as recently affirmed as meeting scrutiny by the U.S. Court of Appeals in *Americans for Clean Energy*, we support EPA's weighting of the likelihood of fuel delivery from various categories of projects. In submitting these affidavits, we do not ask EPA to rely solely on our accounting. Rather we have provided EPA with the raw data that will enable and expedite EPA's due diligence. We urge EPA to give considerable weight to commercial-scale gaseous biofuel projects that are developed by proven RIN producers, using pre-approved pathways and proven technology.

The proposed rate-of-growth methodology poses too great a risk of high inaccuracy by excluding current and historic market data from its analysis. As such, we cannot support it, or the proposed cellulosic biofuel RVO for 2018. With minor adjustments to account for construction in progress, investments made, and pathway applications submitted, we are confident that EPA can set a course for an accurate RVO in 2018 and beyond.

Please accept our comments as constructive and submitted with great appreciation for the substantial work EPA staff has undertaken to deliver a draft rule for stakeholder consideration. We consider it fortunate, and a reflection of EPA's diligence, that a minor adjustment to a single formula (albeit with great impact and broad implications) is all that stands between the present draft and a very supportable final rule.

EPA is Correct to Waive Statutory Volumes for Cellulosic Biofuel in 2018.

Congress intended that the RFS create and grow a cellulosic biofuels market in the United States. The Energy Independence and Security Act of 2007 (EISA) tables of statutory "applicable volumes" demonstrate the growth in demand they intended the RFS to drive. While Congress overestimated the commencement and rate of industry growth, they offered provision for EPA's alternative administration of the program.

The Clean Air Act requires that the RVO for cellulosic biofuel be the lesser of volume specified in CAA 211(o)(2)(B)(i)(III),³ or EPA's assessment of "projected volume available" during the calendar year in coordination with other federal agencies.⁴

We agree that EPA is correct in its determination that "projected volume available," and not the statutory table, is appropriate for setting cellulosic biofuel obligations in 2018. While the renewable natural gas industry is experiencing unprecedented growth in transportation fuel production, total capabilities for production have not yet reached statutory table levels. Given market realities, we do not believe it is proper or prudent for EPA to set obligations at the statutory level. Doing so would destabilize the RFS, the RIN market, and the cellulosic biofuel

² Clean Air Act (CAA) § 211(o)(2)(B)(i)(III).

³ 7 billion gallons in 2018.

⁴ CAA § 211(o)(7)(D)(i).

industries since we would be unable to meet such high demand. Notwithstanding our concerns with the method of determining the 2018 projected volume available, the RVO process reflected in the proposed rule is proper since there is inadequate domestic supply to meet the applicable volumes specified in the Clean Air Act.⁵

<u>Historic RIN Generation Data Alone is Insufficient to Project Cellulosic Biofuel</u> Production in 2018.

EPA is obligated to follow the court rulings that speak directly to the Agency's administration of the RFS. EPA is required by court order to employ a "neutral methodology" that is a "prediction of what will actually happen" when setting future year RVOs.

The proposed 2018 cellulosic biofuel volume requirement does not take into account information known to EPA as of the date of publication concerning present market activity impacting 2018 gaseous cellulosic biofuel volumes. While the draft rule claims consideration of a multitude of relevant factors, the proposed rate-of-growth methodology ("rate-of-growth") employed only considers one data set – historic EMTS data, comparing January – May 2016 to January – May 2017 to arrive at a 9.3% growth rate. EPA assumed that this growth rate, based on five months of EMTS data, is representative of the annual growth rate.

As proposed, *rate-of-growth* tells us that 2017 volume available will be 202 Million Gallons (185.14 x 1.093). When EPA published this Draft Rule, it had May 2017 data available showing 22 Million Gallons for the month – over 6 Million Gallons (+27%) greater than May 2016 (16M). Production has since been reported at 23 Million Gallons in June and 20 Million in July 2017. If we assume no further volume growth, and business as usual production averaging 20M per month to close the year, we would end 2017 at 235 Million Gallons – 33 Million Gallons over the rate-of-growth projected supply for 2017. Due to the fact that additional projects will come online before the end of 2017 and operational projects that have pending registrations will be approved (and begin generating RINS), the inaccuracy will be magnified. The 9.3% growth rate provided for in the draft rule fails to match current market realities.

A neutral methodology requires that EPA refrain from making formula adjustments for political or policy purposes. A neutral methodology must necessarily include all available objective data regarding historical production of cellulosic biofuel, pending registrations and data regarding construction of new cellulosic biofuel production facilities. To fulfill the second half of the Court's test and provide a prediction of what will actually happen, EPA must be willing and able to respond to all available data.

⁵ CAA § 211(o)(7)(A).

⁶ American Petroleum Institute v. Environmental Protection Agency, No. 12-1139 (C.A. D.C., Jan. 25, 2013), at 10.

⁷ Id.

D3 Cellulosic biofuel volumes grew from 140 Million Gallons in 2015 to 190 Million Gallons in 2016 – a growth of 50 million gallons and a rate-of-growth of 35.7% (50/140), and very much out of line with the proposed 9.3% growth rate that the 5-month data set suggests. If EPA had applied this 12-month rate of growth in the same manner as it has done in this proposed rule, multiplying 2016 eligible cellulosic RINs (185.14) by 1.35 to arrive at 250 Million Gallon projection for 2017, it would match more closely with current EMTS activity trending toward 235 Million Gallons (assuming a flat-line of 20 Million Gallons per month through December), and RNG Coalition data showing anticipated 2017 production at 252.25 Million gallons.

Table 2

EMTS Public Data	Million EGE / RINS	Annual Growth
2013 Cellulosic Biofuel (D3)	0	N/A
2014 Cellulosic Biofuel (D3)	33	N/A
2015 Cellulosic Biofuel (D3)	140	+76.4%
2016 Cellulosic Biofuel (D3)	190	+35.7%
*2017 Cellulosic Biofuel (D3) BAU Projected Assuming 20M per Month through December Production	235	+19.1%

Table 3

RNG Coalition Data	Number of Projects	2017 Volume (Million EGE)
Registered RNG D3 Facilities	44	240.52
Operational RNG D3 Facilities, Pending Registration Approval	8	8.19
Commercial-Scale RNG D3 Facilities, Under Construction	19	3.54
Commercial-Scale RNG D3 Facilities, Substantial Development	5	0
TOTAL	76	252.25

Still, while full year comparisons would have resulted in a better estimate for 2017, choosing a larger historical set of RIN generation data is not enough. Historic RIN generation data alone could not have predicted that seventeen (17) RFS-registered RNG facilities would make investments to expand their existing RNG production from 123.32 Million gallons to 145.02 Million gallons. This development reality, however, will result in 21.70 Million Gallons of new 2018 RFS Volume.

Historical RIN generation data alone does not reveal that there are eight (8) Renewable Natural Gas facilities that are operational today but are not generating RINs solely because their registration is still pending with EPA, or that there are nine (9) Renewable Natural Gas projects under construction that will come online before the end of 2017, or that there are another ten (10) currently under construction that will come online in 2018.

The RNG industry is on schedule to add thirty-two (32) cellulosic biofuel facilities and 164.97 Million Gallons by the end of 2018.

The historic data utilized by EPA in the proposed rule is incomplete and therefore insufficient.

Table 4

Renewable Natural Gas D3 Facilities - New 2018 Volume	Number of Projects	NEW 2018 Volume (Million EGE)
Registered D3 Facilities, Online	26	2.7
Registered D3 Facilities, Online and Growing	18	22.91
Operational D3 Facilities, Pending Registration Approval by EPA	8	18.56
Commercial-Scale D3 Facilities, Under Construction, Operational in 2017	9	47.53
Commercial-Scale D3 Facilities, Under Construction, Operational in 2018	10	56.93
Commercial-Scale D3 Facilities, Substantial Development, Operational in 2018	5	16.34
TOTAL	76	164.97

If EPA had used the 12-month growth rate of 35.7%, the 2018 RVO would be 340.92 Million Gallons ($185.14M \times 1.357 = 251.23 \times 1.357 = 340.92$). To determine whether this number has a high likelihood of accuracy or inaccuracy, it must be viewed in the context of industry activity.

EPA has proven that a project-by-project assessment of the Cellulosic Biofuel industry is achievable. Over the past several years, this has been the standard operating procedure. Further, the U.S. Court of Appeals in *Americans for Clean Energy* ⁸ recently ruled that EPA's project-by-project approach was reasonable and met the standard of scrutiny.

In the draft rule 2018 RVO, EPA explained its rationale for proposing to change the methodology from a weighted project-by-project assessment to a rate-of-growth methodology, citing two reasons.

First, EPA cites the fact that 2016 biogas-derived compressed natural gas (CNG) and liquefied natural gas (LNG) projections fell short of the 2016 RVO. EPA notes that its prior methodology overestimated production by 22 Million Gallons in 2016 (approx. -10%). EPA also notes that its 2015 biogas-derived CNG and LNG projections underestimated production by 17 Million Gallons (approx. +14%).

We submit that the prior methodology's overestimation in 2016 is not justification for a change in approach. The difference between projected and actual volume is relatively minimal. Further, the fact that EPA under-estimated production volume in 2015 at a similar minimal rate leads us to conclude that the prior methodology has proven itself neutral – aiming slightly low in one year, and slightly high in the next.

⁸ Americans for Clean Energy v. EPA, No. 16-1005, slip op (D.C. Cir. July 28, 2017).

Second, EPA cites the mature status of the industry, stating: "More importantly, we believe that the technology and market for CNG/LNG derived from biogas used as transportation fuel is sufficiently mature that a facility-by-facility assessment of potential production is unnecessary and not the most appropriate method for projecting the production of these fuels in 2018 across the entire industry."

We agree that many of the technologies we are using are not new. RNG producers utilize the best proven technologies derived from decades of experience in natural gas and biogas treatment. RNG companies and public entities have a long history of proven experience in sectors complementary to their present work on RFS-qualified projects, including specialization in geologic natural gas, biogas treatment, electricity generation, fuel delivery, commodity marketing, waste management and air quality compliance.

The RNG industry has a proven track record of building commercial-scale facilities that produce America's cellulosic biofuel. EPA is justified in its belief that we can deliver the domestic fuel that Congress has called for. Where the "sufficiently mature" label falls short, however, is in the exact arena where EPA proposes to apply it. Renewable Natural Gas, as a cellulosic biofuel, has a history of EMTS data that only dates back three (3) years. Our industry's participation in, and compliance with, the cellulosic provisions of the RFS are still in its relative infancy. As such, a methodology that relies only on historic EMTS data lacks an adequate sample size to distinguish volatility from trends.

Finally, although not stated in the draft rule, we have heard a clear message from EPA that the data our industry has submitted to EPA in the past lacked transparency because it was claimed as Confidential Business Information (CBI). Although EPA has full access to the data reported from the RNG Coalition, EPA's inability to fully show its work in public and on the record has made it difficult for EPA to defend the decisions it makes regarding the annual cellulosic biofuel RVO.

To address these concerns, the RNG Coalition has delivered sixty-nine (69) signed affidavits to EPA (with 61 waiving claims of Confidential Business Information) from renewable natural gas projects with anticipated 2018 cellulosic biofuel volume. These affidavits identify each project's current operational status and fuel production volumes.

We urge EPA to incorporate the RNG Coalition's affidavit-supported data using the court-affirmed projection methodology from prior RVO rules, and to apply weighted multiples to projects to come to an RVO that aims to reflect what will actually happen in 2018.

It is critical that the 2018 RVO Final Rule consider all relevant historical data <u>and</u> current market activity information as it becomes available. This entails the following:

- (1) The historic RIN generation data utilized should include all available data up to the month of final rule approval.
- (2) The historic data should include the RINs that would have been generated from

- operational projects that are pending EPA registration.
- (3) The RVO should include a minimum 50% probability weighted volume to account for projects that are under construction or in substantial development and that have submitted affidavits regarding completion of the project during 2017 or 2018.

Including these data sets would produce a minimum 2018 RVO for D-3 RINS from gaseous biofuels of 345.78 Million Gallons (*over 100 Million Gallons more than the Draft Rule proposal*), keeping in mind that these numbers do not yet incorporate qualified cellulosic ethanol.

Table 5

Renewable Natural Gas D3 Facilities	2017 Volume (Million EGE)	2018 Volume (Million EGE)	Difference	Multiple	Volume Included	2017 Volume + Volume Included
Registered D3 Facilities	240.52	266.13	25.61	0.75	19.21	259.73
Operational D3 Facilities, Pending Registration Approval	8.19	26.75	18.56	0.75	13.92	22.11
Commercial-Scale D3 Facilities, Under Construction	3.54	108	104.46	0.50	52.23	55.77
Commercial-Scale D3 Facilities, Substantial Development	0	16.34	16.34	0.50	8.17	8.17
TOTAL	252.25	417.22	164.97		93.53	345.78

When measured against historical RIN generation data, the projection checks out. As discussed above, D3 Cellulosic volume grew by 35.7% when comparing full-year 2015 EMTS data against full-year 2016 EMTS data. If EPA had used the 12-month growth rate of 35.7%, the 2018 RVO would be 340.92 Million Gallons (185.14M x 1.357 = 251.23 x 1.357 = 340.92).

The fact is, the rate-of-growth methodology proposed by EPA is entirely dependent on the range and location of the data chosen. July 2016 versus July 2017 shows a 125% rate of growth (15.3M vs 20.3M). June 2016 versus June 2017 shows a 136% rate of growth (14.1M vs 22.1M). The most recent 12-months versus the 12-months prior to that shows a rate of growth of 118% (173.7M vs 213.1M). The most recent 15-months compared to the 15-months immediately prior to that shows a rate of growth of 127% (186.6M vs 258.7M). **Historical RIN generation data is a good barometer to measure current market information, but historic data and trends alone are not enough.**

We urge that EPA take action to amend the rate-of-growth methodology as outlined in the proposed 2018 RVO to a more robust methodology that considers current and historic market activity and not just historical EMTS data covering a limited time period.

EPA's Final Rule Should Consider CWC Use in Determining Volume Available.

As discussed above, EPA has a statutory obligation to set the RVO at the "projected volume available during the calendar year." The Proposed Rule includes projections of cellulosic biofuel production. EPA should include provisions for volume available due to additional supply introduced to the market through the use of cellulosic waiver credits (CWC) beyond what is necessary to close the gap between actual production and the cellulosic mandate.

Cellulosic Waiver Credit data posted to EPA's website indicates that 12 Million CWCs were purchased in 2015. As noted earlier, gaseous cellulosic biofuels *out produced* the 2015 RVO by 17 Million Gallons. In other words, additional supply was introduced into the market in excess of the 2015 RVO and obligated parties still purchased considerable volumes of CWCs, which were designed to address a market that *under produced*, despite the over production of D3 RINS in 2015. The CWCs issued should be considered in EPA's assessment of volume available in establishing the following year's RVO. Use of the CWC is not driven by market forces and therefore leads to perpetuating situations of excess availability that weigh on the margins of cellulosic biofuel producers in ways unintended by the regulation.

If EPA does not have such consideration in its RVO setting methodology, the methodology will have a bias toward excess availability, contrary to EPA obligations. Such a situation would undermine the objectives of the statute by putting adverse market pressure on the development of significant volumes of cellulosic biofuels. In order to create market certainty for renewable fuel producers and obligated parties, EPA should clarify that its methodology does and will include such considerations.

EPA Must Continue to Send Clear Market Signals to the Cellulosic Biofuel Industries.

Financing is among the most significant challenges cellulosic biofuel producers face in their efforts to bring new biofuel to the U.S. market. Underwriting requires a degree of certainty that the RFS has not yet sufficiently provided. Cellulosic biofuel producers must be able to demonstrate to their financiers that there will be a sufficient market for the fuel they produce.

We request that EPA continue to make clear and regular statements about its intent not to strand available cellulosic biofuel produced in compliance with the RFS, especially where total biofuel available is well under the statutory limits.

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IV. CONCLUSION

The Coalition for Renewable Natural Gas, Natural Gas Vehicles for America, Energy Vision, National Waste & Recycling Association, and Solid Waste Association of North America, thank EPA for consideration of our comments and for the significant effort you put into the Proposed Rule.

We urge that EPA take action to amend the methodology set forth in the proposed 2018 RVO to a more robust methodology that considers not just a limited set of historical EMTS data, but rather (1) all available RIN generation data, (2) volumes from projects that are pending registration with EPA and (3) volumes from projects that are under construction or in substantial development and have submitted affidavits attesting to their anticipated 2018 production levels. We also urge the EPA to account for CWC use in determining the volume available when establishing the RVO. The gaseous cellulosic biofuel industries are growing strong and gaining momentum, thanks in part to the cellulosic biofuel provisions of the RFS. Your action on this final rule is critical to the continued development of America's Cellulosic Biofuel.

We look forward to continuing to work with EPA to ensure sustained success and a cleaner, more diverse fuel supply for all Americans.

Sincerely,

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