

The Honorable Ed Whitfield Chairman Subcommittee on Energy and Power Energy and Commerce Committee U.S. House of Representatives Washington, D.C. 20515 The Honorable Bobby Rush Ranking Member Subcommittee on Energy and Power Energy and Commerce Committee U.S. House of Representatives Washington, D.C. 20515

## Re: Testimony for the Official Record of the Hearing entitled "The Renewable Fuel Standard – Implementation Issues" Held on June 22, 2016

Dear Chairman Whitfield, Ranking Member Rush, and Subcommittee on Energy and Power:

The Renewable Natural Gas (RNG, biomethane or upgraded biogas) industry is leading in the delivery of cellulosic biofuel in the United States. Compressed natural gas (CNG) and liquefied natural gas (LNG) derived from renewable feedstocks, including agriculture wastes, municipal wastewater, and municipal solid waste in landfills, make up a heavy majority of our nation's cellulosic biofuel production and generation of D3 RINs under the Renewable Fuel Standard (RFS). Renewable CNG and renewable LNG made up 98% of cellulosic RIN generation under the RFS program in 2015.

We thank the Subcommittee on Energy and Power for the opportunity to comment on the June 22 hearing entitled: *The Renewable Fuel Standard – Implementation Issues*. Given the scope of our respective representation and given that other Advanced Biofuel (D5 RIN) industry representatives are providing testimony or comment to the hearing, we will limit our comments to issues impacting gaseous cellulosic biofuels.

### I. ABOUT US

The Coalition for Renewable Natural Gas (RNG Coalition) is a not-for-profit association that provides public policy advocacy and education for the RNG industry in North America. Our members represent the full value chain of cellulosic waste feedstock conversion to transportation fuel as regulated under the RFS, including producers of 90% of all the RNG in North America. Together, we are dedicated to the advancement and increased utilization of RNG as a clean, green, alternative and domestic energy and fuel resource.

## II. COMMENTS TO THE HEARING TO EXAMINE IMPLEMENTATION ISSUES OF THE RFS

### The RFS is delivering on its purpose to stimulate growth and development of advanced and cellulosic biofuels.

Congress intended that the RFS create and grow cellulosic and advanced biofuels markets in the United States. The Energy Independence and Security Act of 2007 (EISA) tables of statutory "applicable volumes"<sup>1</sup> demonstrate the growth in demand they intended the RFS to drive in biofuels industries. The statutory table shows that in the long-term, the majority of growth was intended to come from cellulosic and other advanced biofuels.

Congress set volumes in the statutory tables using the best information available at the time, with limited ability to predict actual market implementation or account for environmental or market risks. Many factors, including, but not limited to the financial recession and lack of certainty of policy stability, delayed the commencement and rate of growth in the cellulosic biofuels industry.

The commencement and rate of industry growth that Congress intended under the RFS is now occurring, simply at a delayed interval compared to what Congress anticipated. The production and use of RNG as a cellulosic transportation fuel is now growing at an unprecedented rate (see Figure 1 and Figure 2). Since the pathway approval of renewable CNG and LNG as an eligible cellulosic biofuel under the RFS phase 2 amendments in 2014, the industry has responded.

Figure 1:



<sup>&</sup>lt;sup>1</sup> Clean Air Act (CAA) 211(0)(2)(B)(i)(III).

In a partial year in 2014, EPA called for 33 million D3 RINs. Production increased over three-fold in 2015, with 140 million D3 RIN gallons produced under the program. RNG industry data that we have submitted to EPA as confidential business information indicates that the cellulosic biofuels industry is on track to meet the 230-million-gallon requirement set by EPA for 2016.

EPA proposes a 2017 cellulosic biofuel requirement of 312 million gallons. This number represents a 35% increase over the 2016 requirement, and is more than double the volume produced under the program in 2015. This progressive increase in the cellulosic biofuel requirement is both warranted by law and supported by comprehensive and sound data that demonstrates the considerable growth and progress of the cellulosic biofuel industries. In fact, since EPA released its 2017 RVO earlier this year, new projects have entered contracts for RNG deployment and have begun construction. As EPA considers this newly available data, we anticipate that a higher cellulosic biofuels RVO for 2017 will prove warranted.

As in years past, we anticipate that Renewable-CNG and Renewable-LNG will predominantly supply U.S. demand for cellulosic biofuel in 2017, as reflected in the renewable volume obligation (RVO) of the Proposed Rule.

Figure 2:

40 PROJECTS IN NORTH AMERICA PRODUCE ULTRA-LOW CARBON RNG FOR TRANSPORTATION FUEL USE; AND THE NUMBER OF PROJECTS IS ON TRACK TO DOUBLE TO 80 BY THE END OF 2018



We support the stated cellulosic biofuel provisions impacting Renewable Compressed and Renewable Liquefied Natural Gas in the RFS, and in the 2017 Renewable Fuel Volume Obligations (RVO).

The RFS is driving growth in RNG and accomplishing what creators of the program aimed for – deployment of domestic, ultra-clean renewable fuel. As such, Congress should send strong signals to the market by instructing EPA to continue administering the gaseous cellulosic biofuel provisions within the existing RFS framework.

If Congress chooses to begin amending the RFS, the original intentions of the program would be best served through a firm commitment by Congress to continue the current program's cellulosic biofuel provisions.

Elimination of the cellulosic and advanced biofuel provisions in the RFS program would have unpredictable effects. It may endanger the survival of the cellulosic biofuels industries – the precise fuels category that Congress intended to grow long term by instituting the RFS. This would have significant environmental and economic consequences (see Figure 3).

On a "life-cycle" basis,<sup>2</sup> RNG has the lowest carbon intensity of all transportation fuels.<sup>3</sup> RNG has a near-zero carbon footprint and in some cases is carbon negative.<sup>4</sup> Geologic natural gas can reduce vehicle carbon dioxide emissions by 20 to 25 percent over diesel.<sup>5</sup> RNG reduces carbon dioxide emissions by 80 percent or more over diesel.<sup>6</sup> Finally, natural gas (geologic and renewable) can reduce toxic pollutants such as nitrous oxides and sulfur oxides by as much as 80% and 99% respectively as compared to diesel.<sup>7</sup>

Figure 3:



Cellulosic biofuels industry entrepreneurs, business owners, financiers, and marketers have invested over a billion dollars in response to Congress enacting the RFS program. RNG projects have not only helped decarbonize our nation's natural gas pipelines and transportation system, but also have created more jobs per project than any other renewable energy (120 direct and indirect jobs per project). We respectfully, but critically, request that members of the Committee and members of Congress regard the

<sup>&</sup>lt;sup>2</sup> "Life-cycle" analysis takes into account the carbon intensity of production, distribution, and end-use, etc.

<sup>&</sup>lt;sup>3</sup>Energy Vision and U.S. Department of Energy Clean Cities Program, "Turning Waste Into Vehicle Fuel: Renewable Natural Gas (RNG): A Step-By-Step Guide For Communities; Page 6.

<sup>&</sup>lt;sup>4</sup> U.S. Department of Energy, Clean Cities Program, "Turning Waste Into Vehicle Fuel: Renewable Natural Gas (RNG): A Step-By-Step Guide For Communities; Page 6.

<sup>&</sup>lt;sup>5</sup> Id.

<sup>&</sup>lt;sup>6</sup> According to CA-GREET, version 1.8B and *Argonne National Laboratory*, "Waste-to-Wheel Analysis of Anaerobic-Digestion-Based Renewable Natural Gas Pathways with the GREET Model," *September 2011*.

<sup>&</sup>lt;sup>7</sup> "Natural Gas and the Environment." *NaturalGas.org.* n.p., 20 Sept. 2013. Web. 13 Aug. 2015. http://naturalgas.org/environment/naturalgas/

economic and environmental advantages of keeping the cellulosic biofuel provisions of the RFS in place.

#### <u>Congress and EPA Must Work Together to Continue to Send Clear Market Signals</u> 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.

EPA took a significant and positive step in that direction last year with the release of three years of published RVOs. The reaction from the financing community has been positive. Cellulosic biofuel projects are more readily obtaining financing and receiving terms that reflect a more stable market. The continuation of the RVO process, on a regular schedule, and using consistent methodologies, will continue to send positive market signals.

Questions and rumor surrounding the future of the RFS post-2022 continue to limit financing and contract commitments. We will continue to provide education about RFS and reassure decision makers that the program does not sunset in 2022 – that new legislation would have to be passed by Congress and signed into law by the President for any changes to the program to take effect. We request that EPA assist us in this effort by making clear and regular statements about the future of the program post-2022.

Additionally, we request that Congress join EPA in making 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.

### Implementation of the RFS is back on track, and Congress should allow EPA to continue on course.

EPA's administration of the RFS is back on track. In early 2015, EPA published a joint draft rule for the 2014-2016 RVOs, and accepted comment on the draft. In November 2015, EPA placed the RFS on schedule by releasing the 2014-2016 Renewable Fuel Volumes Final Rule.

Administration of the program for 2016 remains on track, with EPA having issued the 2017 RVO Draft Rule on time in May 2016. All indicators point to EPA achieving publication of a final rule by the November 2016 target date.

Additionally, EPA has been responsive and cooperative in continuing to work with the RNG industry in its administration of the program. We commend EPA for their ongoing engagement with the RNG Coalition, specifically, and with the cellulosic biofuels industries generally, to ensure EPA's rulemakings continue to improve D3 RIN market liquidity.

As further example that EPA's administration of the RFS is working, we offer the following two points, which reflect content we also plan to submit in our comments to EPA's 2017 RVO Draft Rule. We will reserve our remaining comments concerning the 2017 RVO to the appropriate rulemaking.

# 1. EPA is Correct to set the 2017 Cellulosic Biofuel Requirement at a Level Below Statutory Table Volumes.

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(0)(2)(B)(i)(III),<sup>8</sup> or EPA's assessment of "projected volume available" during the calendar year in coordination with other federal agencies.<sup>9</sup>

We agree that EPA is correct in its determination that "projected volume available," and not the statutory tables, is appropriate for setting cellulosic biofuel obligations in 2017. 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 industries since we would be unable to meet such high demand. The RVO process reflected in the proposed rule is preferred and proper.

### 2. EPA's Processes Yield Fair Predictions of Cellulosic Biofuel Production

Beyond statute, EPA is obligated to follow the court rulings that speak directly to the Agency's administration of the RFS. Most applicably, by court order, EPA must employ a "neutral methodology"<sup>10</sup> that is a "prediction of what will actually happen"<sup>11</sup> when setting future year RVOs.

<sup>11</sup> Id.

<sup>&</sup>lt;sup>8</sup> 5.5 billion gallons in 2017.

<sup>&</sup>lt;sup>9</sup> CAA 211(o)(7)(D)(i).

<sup>&</sup>lt;sup>10</sup> American Petroleum Institute v. Environmental Protection Agency; January 25, 2013, at 10.

We agree that the proposed 2017 cellulosic biofuel volume requirement is based on a projection of production, as known to EPA at the date of publication, that reflects a neutral aim at accuracy.

As of March 2016, we anticipated that Renewable-CNG and Renewable-LNG production should yield 376 million gallons (EGE) qualified under the RFS in 2017. This number is based upon thorough data from RNG projects currently online and flowing renewable natural gas, from existing projects undergoing expansion, from existing projects coming off contract from alternative non-transportation fuel applications and transitioning to transportation fuel application, and from planned and advancing new construction RNG projects with scheduled online dates in 2017.

EPA has accepted and considered this information, including primary source data submitted as Confidential Business Information. In total, the data reflects 51 RNG projects, including 27 projects that were online in 2015, 10 projects that have (or will) come online in 2016, and 14 projects currently under development with scheduled online dates in 2017. The RNG projects are located in 23 different U.S. States and Canadian Provinces.

EPA uses a baseline of 384 million gallons, including 167 million gallons from new facilities. Given the information available to us and to EPA at the time, this number is reasonable.

As in prior years, EPA uses a projection methodology applying percentile multiples to categories of projects. For new Renewable-CNG and Renewable-LNG projects the projected volume is marked at the 50% percentile of a range of likely production, with 167 million gallons on the high end and zero on the low end, for a total projected volume of 84 million gallons. For Renewable-CNG and Renewable-LNG projects with a history of production the projected volume is marked at the 75% percentile of a range of likely production, with 217 million gallons on the high end and 148 million gallons on the low end, for a total projected volume of 200 million gallons.

It is certainly our intention to support cellulosic biofuel developers and enable them to become successful producers under the RFS. However, given the history of production from cellulosic biofuel sources, we agree that EPA's methodology does a reasonable job at projecting *production* with a neutral aim at accuracy.

As new production information becomes available in the interim period between the draft and final rule, it remains imperative that all new volume data be incorporated into the 2017 RVO numbers. EPA has demonstrated their willingness and ability to consider newly available data in the past. It is appropriate that they continue this practice into the future.

Additionally, we continue to urge EPA's incorporation not merely of fuel production

(which we agree they adequately capture within their current processes) but also of fuel available due to other factors like excess volumes from prior year production over the RVO, and excess volume available due to obligated parties' cellulosic waiver credit purchases.

#### **IV. CONCLUSION**

The Coalition for Renewable Natural Gas thanks the Subcommittee on Energy & Power for consideration of our comments. Also, on behalf of the renewable natural gas industry, we would like to thank EPA for their timely and successful administration of the RFS program. The gaseous cellulosic biofuel industries are growing stronger and gaining momentum, largely in part to the cellulosic biofuel provisions of the RFS.

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

Sincerely,



Marcus Gillette Director of Public & Government Affairs Coalition for Renewable Natural Gas



David Cox General Counsel & Director of Operations Coalition for Renewable Natural Gas