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U.S. Environmental Protection Agency
Air and Radiation Docket and Information Center
Mailcode 2822T
1200 Pennsylvania Ave., NW
Washington, DC 20460

Submitted via <u>www.regulations.gov</u>.

Re: Comments on EPA's Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017 (Docket No. EPA-HQ-OAR-2015-0111).

POET, LLC ("POET") hereby submits comments on the EPA notice of proposed rulemaking "Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017" published in the Federal Register on June 10, 2015 (80 Fed. Reg. 33,100) (the "NOPR").

POET is one of the largest ethanol producers in the world, with 27 biorefineries located in seven states. POET has pioneered a new business model using farmers, communities, and other stakeholders as the primary investors in ethanol plants, allowing ethanol production to give back even more to the communities and states where plants are located. POET has also invested heavily in next-generation cellulosic ethanol technology, and through a joint venture with Royal DSM has commenced operations at one of the nation's first commercial-scale cellulosic ethanol facilities, Project LIBERTY. Through its existing plants, and its investment in cellulosic and other advanced biofuels technologies, POET is committed to providing cleaner fuels for our nation's motor vehicles.

### **Executive Summary of Comments on the Proposed Rule**

EPA can set readily-achievable Renewable Volume Obligations (RVOs) in 2014 through 2016 without resorting to the general waiver authority – the proposed use of which is contrary to the language, structure and goals of the statute. EPA's use of the general waiver authority as proposed would be immediately subject to litigation that would throw the Renewable Fuel

Standards (RFS) into turmoil, create uncertain national fuel markets, and tarnish the legacy of EPA and this Administration.

EPA's proposed weakening of the required base renewable fuel (the difference between the RVOs for the total renewable and advanced biofuel volumes) would permanently undermine the purpose and function of the RFS. EPA's proposed standards are already a proven failure and have been demonstrated to be too weak. The market has responded to the proposal with crashing D6 RIN prices, undermining the very mechanism necessary to push for higher volumes of biofuels. RIN prices – particularly for D6 RINs that are the largest category of RIN – incentivize the build-out of biofuels distribution infrastructure and reduce biofuels prices. This is exactly what Congress intended, and exactly what a market-based regulatory program does—put a price on certain behavior (here, use of petroleum transportation fuel) and incentivize other desired behavior (biofuels use).

POET – one of the world's largest investors in cellulosic biofuels – expects to stop all future U.S. cellulosic investments if EPA's proposed base renewable fuel requirements are not strengthened. The development of cellulosic and other advanced biofuels is inexorably entwined with continued regulatory predictability based on RFS targets (e.g., the statutory 15 billion gallon base renewable RVO in 2016). EPA lowering the base renewable requirements will effectively undermine the entire RFS program and destroy confidence in its incentive structure for all biofuels.

EPA can avoid this adverse outcome by passing through the projected cellulosic volumetric shortfall under Clean Air Act section 211(o)(7)(D) to the advanced and total renewable targets, e.g., for 2016, the next fully available compliance year. EPA can then set strengthened RVOs that are readily capable of being met in 2014 through 2016. EPA's authority under 211(o)(7)(D) has already been upheld by the D.C. Circuit. Furthermore, by establishing a methodology where EPA passes through a cellulosic production shortfall to the total and advanced targets without otherwise reducing base renewable volumes, EPA can set the RFS on a path to success through 2022, the last year of statutorily-specified volumes.

EPA has already determined (correctly) that RIN prices don't increase retail gasoline prices. Incumbent petroleum interests have monopolized the nation's transportation fuel supply, and lacked a financial incentive to cooperate in diversifying the nation's transportation fuel because of EPA's delayed, proposed RVOs and market signals contained therein. Raised RVOs and RIN values are necessary to provide the economic boost to increase biofuels use, as Congress intended, and these values can be raised without harming consumers.

EPA's reducing the base renewable targets as much as the NOPR proposes would be a grave mistake. In particular, EPA has no basis or need – technical or legal – for lowering the

base renewable target for 2016 from the statutory level. This target must be raised to the full statutory volume for 2016. POET considers EPA raising the proposed base renewable targets for 2014-2016 to be by far the most significant need with respect to conforming EPA's proposal to the statutory requirements and intent.

In the comments below, POET discusses the following issues in more detail:

I.	EPA's proposed weakening of the base renewable fuel targets – particularly for 2016 – would permanently undermine the purpose and function of the RFS4
II.	Biofuels producers are readily capable of producing the statutorily-mandated 15 billion gallons of Base Renewable fuel11
III.	<ul> <li>The Base Renewable RVOs must be significantly strengthened to maintain investment in U.S. biofuels development</li></ul>
IV.	EPA's proposed reduction of the Base Renewable RVOs cannot withstand judicial scrutiny27
V.	The RFS program is readily capable of functioning as intended if EPA strengthens the required Base Renewable fuel30

#### **Detailed Discussion of Comments**

I. EPA's proposed weakening of the base renewable fuel targets – particularly for 2016 – would permanently undermine the purpose and function of the RFS.

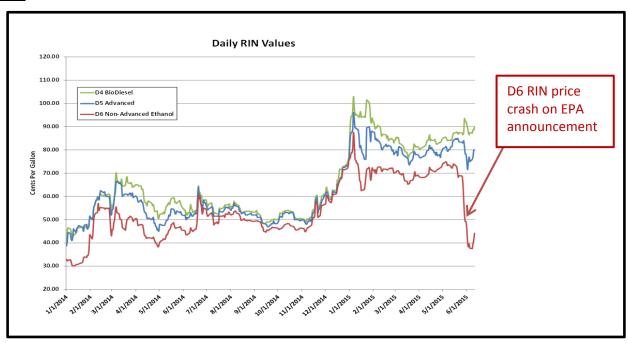
EPA finalizing the 2014-2016 base renewable standards at the proposed levels would have a devastating impact on biofuels development, and undermine the RFS.

A. The market has already proven EPA's proposal to be a failure – crashing D6 RIN prices undermine measures needed to increase biofuels use.

The RFS contains several types of annual targets for the blending of biofuels into gasoline and diesel, including a target for advanced biofuels (the "Advanced" target) and a target for total renewable fuels (the "Total" target). The "Base Renewable" target is the difference between the Total and Advanced targets.

All biofuels (i.e., that are eligible for any RFS category, including cellulosic, biodiesel and other biofuels) can compete to satisfy Base Renewable volumes. Historically, Base Renewable volumes have been met mostly with D6 RINs, which include RINs generated by producing conventional ethanol. As showing in Figure 1 below, D6 RIN prices crashed upon EPA's release of the NOPR on May 29, 2015, demonstrating that EPA's proposal would eviscerate incentives for increasing biofuels use.

Figure 1:



Studies demonstrate that RIN values such as those remaining after the D6 RIN price crash following the NOPR release are not sufficient to incentivize the use of biofuels (through price discounts) or related infrastructure for increased biofuels development. For instance, commentators have noted that the market has determined EPA's proposed Base Renewable target to be a failure, finding that the "huge decline in D6 ethanol RINs prices" immediately following EPA's NOPR release "suggests the market believes ... the proposed ethanol mandates provide little pressure" for higher volumes of biofuels.<sup>1</sup>

Furthermore, the government's own projections – via the Energy Information Agency – highlight shortfalls in EPA's proposal. Under the proposed 2014-2016 RVO's, EIA forecasts ethanol production actually slightly *decreasing*.<sup>2</sup>

The RVO levels EPA proposed, and resulting RIN prices, are insufficient for EPA to meet its obligations to ensure that renewable fuels volumes increase "every year." Notably, EPA's proposed Base Renewable RVO levels would not recover to the 2013 level until 2016.<sup>4</sup> This grossly undermines infrastructure investments and is contrary to Congress' intent that volumes increase every year. As the D.C. Circuit remarked, "high RIN prices should ... incentivize precisely the sorts of technology and infrastructure investments and fuel supply diversification that the RFS program was intended to promote."<sup>5</sup>

The solution is simple: EPA needs to increase the Base Renewable target, and D6 RIN prices will strengthen accordingly. D6 RIN prices are essential for providing the demand pull necessary for infrastructure that will enable developing *advanced* biofuels. Because D6 RINs are much larger in volume, each increment of D6 RIN price increase provides a much greater ability to fund blender pumps and other infrastructure that can be used to distribute

<sup>&</sup>lt;sup>1</sup> See Scott Irwin and Darrel Good, *The EPA's Proposed Ethanol Mandates for 2014, 2015, and 2016: Is There a 'Push' or Not*? (June 3, 2015), p. 7, available at http://farmdocdaily.illinois.edu/pdf/fdd030615.pdf.

<sup>&</sup>lt;sup>2</sup> EIA, *Short-Term Energy Outlook* (June 2015), p. 11, available at http://www.eia.gov/forecasts/steo/archives/Jun15.pdf.

<sup>&</sup>lt;sup>3</sup> See e.g., the NOPR at 33,101 ("The fundamental objective of the RFS provisions under the Clean Air Act is clear: To increase the use of renewable fuels in the U.S. transportation system every year through at least 2022").

<sup>&</sup>lt;sup>4</sup> EPA set the 2013 Base Renewable RVO at 13.8 billion gallons. See EPA final rule, *Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards*, 78 Fed. Reg. 49,794, 49,795-97 (August 15, 2013). By comparison, the NOPR's proposed Base Renewable RVOs for 2014 and 2015 are 13.25 and 13.40 billion gallons, respectively.

<sup>&</sup>lt;sup>5</sup> See Monroe Energy v. EPA, 750 F.3d 909, 919 (D.C. Cir. 2014).

transportation fuels made with advanced as well conventional biofuels.<sup>6</sup> Furthermore, because cellulosic volumes are subject to the cellulosic waiver provisions under Clean Air Act section 211(o)(7)(D), cellulosic targets provide a less reliable incentive for promoting biofuels distribution infrastructure deployment.<sup>7</sup> Additionally, as outlined in detail in the next section, conventional ethanol facilities and strong Base Renewable RVOs are essential to the future of cellulosic ethanol in the United States.

### B. Undercutting the Base Renewable RVOs would destroy the future of cellulosic ethanol in the United States.

POET – one of the world's largest investors in cellulosic biofuels – expects to stop all future U.S. cellulosic investments if the NOPR's Base Renewable fuel requirement is not strengthened.

As of 2013, POET had planned to extend cellulosic technology to 25 plants in the POET network (in addition to Project LIBERTY) and beyond that to other corn ethanol plants in the United States, a fact that EPA had previously noted with approval.<sup>8</sup> This NOPR – and EPA's prior 2014 RVO proposal – have created barriers to these plans that can only be surmounted if EPA drastically changes its approach and requires improved Base Renewable volumes.

In prior comments on EPA's failed 2014 RVO proposal, numerous commenters emphasized that undermining the Base Renewable target would undermine the development of cellulosic ethanol.

POET's cellulosic partner DSM has commented that "If the conventional biofuel RVO is reduced as proposed in the NPRM, cellulosic ethanol will be produced in other parts of the world for other markets, but not in America and not for automobiles operated in this country."

<sup>&</sup>lt;sup>6</sup> Mathematically, a 40 cent increase in 15 billion D6 RINs (e.g., equivalent to the statutory Base Renewable target in 2016) creates a much larger infrastructure investment fund than can the 200 million cellulosic credits that EPA projects for 2016.

<sup>&</sup>lt;sup>7</sup> Under Clean Air Act Section 211(o)(7)(D), for "any calendar year in which the Administrator" reduces the cellulosic RVO due to a production shortfall, "the Administrator may also reduce the applicable volume of renewable fuel and advanced biofuels requirement ... by the same or a lesser volume." This provision is referred to in these comments as the "cellulosic waiver pass-through." Passing through this cellulosic reduction would reduce the Advanced target and its share of the Total target. The Base Renewable target (on which the Advanced target is added to generate the Total) remains unaffected.

<sup>8</sup> See e.g., EPA proposed rule, *Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards*, 78 Fed. Reg. 9,282, 9,289 (February 7, 2013).

<sup>&</sup>lt;sup>9</sup> See POET-DSM, Request for Comments on Proposed 2014 Standards for the Renewable Fuels Program (January 28, 2014)(Docket ID No. EPA-HQ-OAR-2013-0479-7803), p. 5, available at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0479-7803.

Similarly, joint comments made by POET-DSM, Abengoa and DuPont state that EPA reducing the "overall biofuels RVO in 2014 would render the cellulosic ethanol industry in the United States non-viable."<sup>10</sup> These comments remain true.<sup>11</sup>

POET also extensively commented, regarding EPA's previous 2014 RVO proposed rule, on how corn ethanol provides a critical foundation for the development of cellulosic ethanol. However, EPA appears to have glossed over the close relationship between corn ethanol and cellulosic facilities. Many cellulosic facilities would be co-located with conventional, corn-based facilities, through a "bolt-on" model that takes advantage of economies of scale. For instance, POET can cost-effectively expand cellulosic production by siting a cellulosic facility next to an existing grain-based facility, thereby making use of existing infrastructure, including electricity, water, railroad access, and biomass supply (e.g., corn stover from a similar footprint of farms that supplies corn to the pre-existing ethanol facility).

Similar to POET, Abengoa, a major corn ethanol producer, had sought to co-locate new cellulosic facilities "with their currently existing starch ethanol facilities around the United States." However, Abengoa has moved on to other regions, and has announced the development of cellulosic projects in both Brazil and France instead of in the U.S. Similarly, DuPont had also planned to replicate its new corn-based cellulosic facility in Nevada, Iowa "all throughout the U.S." However, following EPA's proposed undercutting of the 2014 Base Renewable target, for DuPont, generally "all investment and opportunity discussions in the United States ceased" and DuPont has been looking abroad for biofuels development opportunities. Expressing dismay with the NOPR on its release, DuPont emphasized "Make no mistake, investments in additional cellulosic ethanol capacity and plants in the United States are absolutely dependent on the EPA fulfilling its obligations to the existing biofuels industry"

<sup>&</sup>lt;sup>10</sup> See the submission to EPA Docket No. EPA-HQ-OAR-2013-0479 (January 28, 2014), attached to comments being filed jointly by these three cellulosic providers for this docket ("Joint Cellulosic Letter").

<sup>&</sup>lt;sup>11</sup> See the Joint Cellulosic Letter, noting that events since early 2014 have demonstrated that EPA's proposed weakening of the Base Renewable RVO would render the cellulosic ethanol industry in the United States "non-viable."

<sup>&</sup>lt;sup>12</sup> See e.g., POET LLC, *Comments on EPA's 2014 Standards for the Renewable Fuel Standard Program* (January 28, 2014)(Docket ID No. EPA-HQ-OAR-2013-0479-3842)(hereafter "January 2014 POET comments"), pp. 3-6, available at <a href="http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0479-3842">http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0479-3842</a>.

<sup>&</sup>lt;sup>13</sup> EPA proposed rule, *2014 Standards for the Renewable Fuel Standard Program*, 78 Fed. Reg. 71,732, 71,740 (November 29, 2013).

<sup>&</sup>lt;sup>14</sup> See the Joint Cellulosic Letter.

<sup>&</sup>lt;sup>15</sup> See Greenwire, *DuPont advances U.S. plant but eyes foreign expansion* (July 16, 2015). See also, the Joint Cellulosic Letter.

<sup>&</sup>lt;sup>16</sup> *Id*.

and "RFS policy certainty is a prerequisite for the existing industry to expand and invest in cellulosic ethanol capacity and new plants." <sup>17</sup>

A market-based regulatory program such as the RFS cannot function properly without regulatory predictability and the statutory targets being respected. A report by biofuels expert Dr. Bruce Babcock has found that a "decision by EPA to reduce ethanol mandates in 2014 and 2015 would send a strong signal ... to investors to not invest in ... next-generation plants that convert cellulosic material to ethanol." Similarly, the International Council on Clean Transportation has found that target reductions such as what EPA has proposed would erode "market confidence for all fuels" especially for "companies that invest in second-generation fuels (cellulosic and other advanced fuels)." This report also found specific adverse impacts on debt markets used to finance new biofuels plants, noting that "second-generation plants rely heavily on market confidence to access and reduce the price of debt financing for plant expansions as they move to commercialize their technologies." 20

Organizations representing dozens of stakeholders have commented to President Obama that EPA's undercutting first generation biofuels would have serious collateral impacts that "scuttle U.S. investment in advanced, low-carbon biofuels." Numerous other reports and analyses have also demonstrated how undercutting first generation biofuels would undermine the development of advanced biofuels, including analysis by environmental and various third-party, non-partisan organizations. Given the importance of the Base Renewable RVOs to cellulosic biofuel development, those Base Renewable targets for 2014 to 2016 must be raised.

<sup>1.</sup> 

<sup>&</sup>lt;sup>17</sup> See DuPont Industrial Biosciences Statement on Environmental Protection Agency Renewable Fuel Standards Rulemaking (June 25, 2015), available at <a href="http://www.dupont.com/products-and-services/industrial-biotechnology/press-releases/dupont-statement-on-epa-rfs-rulemaking.html">http://www.dupont.com/products-and-services/industrial-biotechnology/press-releases/dupont-statement-on-epa-rfs-rulemaking.html</a>.

<sup>&</sup>lt;sup>18</sup> Bruce Babcock & Wei Zhou, *Impact on Corn Prices from Reduced Biofuel Mandates* (November 2013), at 13-14, available at http://www.card.iastate.edu/publications/dbs/pdffiles/13wp543.pdf.

<sup>&</sup>lt;sup>19</sup> Nathan Miller et al., International Council on Clean Transportation, *Measuring and Addressing Investment Risk in the Second-Generation Biofuels Industry* (December 2013), at 25, available at <a href="http://www.theicct.org/sites/default/files/publications/ICCT\_AdvancedBiofuelsInvestmentRisk\_Dec2013.pdf">http://www.theicct.org/sites/default/files/publications/ICCT\_AdvancedBiofuelsInvestmentRisk\_Dec2013.pdf</a>.

<sup>&</sup>lt;sup>20</sup> *Id*.

<sup>&</sup>lt;sup>21</sup> Letter of the Advanced Ethanol Council, and the Biotechnology Industry Organization, to the Honorable Barack Obama, signed on to by 33 companies including POET-DSM (May 14, 2015), at 2, available at <a href="https://www.bio.org/sites/default/files/POTUS">https://www.bio.org/sites/default/files/POTUS</a> RVO May15.pdf.

<sup>&</sup>lt;sup>22</sup> See Ryan Fitzpatrick, *Cellulosic Ethanol is Getting a Big Boost from Corn, for Now* (April 2, 2015), available at <a href="http://thirdway.org/report/cellulosic-ethanol-is-getting-a-big-boost-from-corn-for-now">http://thirdway.org/report/cellulosic-ethanol-is-getting-a-big-boost-from-corn-for-now</a> (explaining "established companies with a sizable presence in the corn ethanol industry" are necessary to overcome the technological and economic challenges to scaling up cellulosic production). In fact, cellulosic projects sponsored by major corn ethanol producers (POET/DSM, Abengoa, and Quad City

C. EPA's proposed 2014-2016 Base Renewable targets are inconsistent with EPA's own interpretation of the statute's purpose – to increase renewable fuel volumes "every year" and promote ethanol offerings beyond E10.

The NOPR makes numerous pronouncements that properly reflect the purpose of the RFS to increase the use of biofuels *every year*:

- o "The fundamental objective of the RFS ... is clear: to increase the use of renewable fuels in the U.S. transportation system *every year* through at least 2022."<sup>23</sup>
- The statute requires EPA to "ensure" that transportation fuel "contains at least the volumes of renewable fuel" required by the statute.<sup>24</sup>
- EPA's proposal is "intended to drive significant growth in renewable fuel use beyond what would occur in the absence of such requirements."<sup>25</sup>

The NOPR further correctly recognizes the need to increase the ethanol content in fuel beyond 10%, and how to go about it by setting targets that result in higher RIN prices than the failed NOPR does:

- Congress "did not intend growth in the renewable fuels market to be ... prevented" by the "E10 blendwall."<sup>26</sup>
- Congress intended "the growth reflected in the statutory tables of applicable volumes would be beyond any previously demonstrated ability of the industry to produce, distribute, and consume renewable fuels."<sup>27</sup>
- "[S]ustained ambitious volume requirements are necessary to provide the certainty of a guaranteed future market that is needed by investors."<sup>28</sup>

Corn Producers) account for more than 80% of total U.S. cellulosic capacity, and that percentage would rise to 88% when DuPont opens its cellulosic facility later this year. *Id.* See also, Jeremy Martin, *Major Surgery or Physical Therapy? Why Stability, Balance and Flexibility are the Right Prescription to Put the Renewable Fuel Standard Back on Track* (March 13, 2015)("in a stagnant market for biofuels, new investments in currently expensive biofuels won't make sense"), available at <a href="http://blog.ucsusa.org/major-surgery-or-physical-therapy-why-stability-balance-and-flexibility-are-the-right-prescription-to-put-the-renewable-fuel-standard-back-on-track-664#appendix.</a>

<sup>&</sup>lt;sup>23</sup> NOPR at 33,101.

<sup>&</sup>lt;sup>24</sup> *Id.* at 33,108, citing <u>Nat'l Petrochemical & Refiners Ass'n v. EPA</u>, 630 F.3d 145, 152-153 (D.C. Cir. 2010). <sup>25</sup> *Id.* at 33,109.

<sup>&</sup>lt;sup>26</sup> *Id.* at 33,102. EPA defines the "E10 blendwall" as "the volume of ethanol that can be consumed domestically if all gasoline contains 10% ethanol and there are no higher-level ethanol blends consumed such as E15." NOPR at 33,102, note 7. or E85.

<sup>&</sup>lt;sup>27</sup> Id at 33,118.

<sup>&</sup>lt;sup>28</sup> *Id*.

"Sustained" and higher "RIN prices create the incentives needed to spur investment in new technologies and production capacity, a critical need if the market is going to continue expanding in future years according to Congress' intentions."<sup>29</sup>

However, EPA's proposed RVOs do not reflect the statute's volumes or intent—and EPA's proposed volumes are inconsistent with EPA's own logic. As the D.C. Circuit previously admonished EPA in a prior RFS rulemaking, EPA is not free to "arrogate to itself purposes outside the statutory provision it is applying."<sup>30</sup>

EPA adopts an RFS approach that makes the program a self-fulfilling failure: reducing targets to what EPA thinks the market can consume based on historically low RIN prices.

Furthermore, EPA fails to make a robust assessment of what RIN prices could drive what volumes. EPA does "not attempt to estimate potential costs related to infrastructure expansion with increased biofuel volumes." Thus, EPA not only engages in an illegal use of the general waiver authority to reduce Base Renewable volumes (as discussed below), but also fails to engage in reasoned decision-making even under its flawed approach. In doing so, EPA fails to adequately grow volumes of biofuels beyond the so-called E10 blendwall, contrary to Congressional intent, and EPA's proposal would send a market signal that would undermine the wider distribution of fuel blends containing more than 10% ethanol.

EPA can hardly be said to "ensure" volumes increase "every year" when EPA acknowledges "the 2014 standards being proposed in this rulemaking represent *reductions* in both the advanced and conventional volumes compared to the 2013 standards."<sup>33</sup> Furthermore, as mentioned above, the Base Renewable RVO doesn't recover to 2013 levels under EPA's proposal until 2016. The Base Renewable RVOs that EPA proposes are simply insufficient to spur increased renewables as Congress intended, as explained throughout these comments.

<sup>&</sup>lt;sup>29</sup> *Id.* at 33,129.

<sup>&</sup>lt;sup>30</sup> API v. EPA, 706 F.3d. 474, 480 (D.C. Cir. 2013)(EPA based its cellulosic target on logic that was inconsistent with the statute). See also, North Carolina v. EPA, 531 F.3d 896, 921 (D.C. Cir. 2008), where an EPA rule was overturned because EPA imposed its own sense of "equity" and reasonableness in contravention of Clean Air Act statutory provisions. That case also emphasized the basic proposition that an agency may not "trespass beyond the bounds of its statutory authority by taking other factors into account" than those to which Congress limited it. *Id.* at 919.

<sup>&</sup>lt;sup>31</sup> See e.g., NOPR at 33,131.

<sup>&</sup>lt;sup>32</sup> Michigan v. EPA, 192 L.Ed.2d 674, 681 (U.S. 2015) ("Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational" and "It follows that agency action is lawful only if it rests 'on a consideration of the relevant factors.'")(citations omitted).

<sup>&</sup>lt;sup>33</sup> NOPR at 33,131 (emphasis added).

# II. Biofuels producers are readily capable of producing the statutorily-mandated 15 billion gallons of Base Renewable fuel.

EPA's proposal would undermine the RFS program at the very moment when the RFS is on the brink of major success – achieving the statutorily-mandated 15 billion gallons of Base Renewable biofuels.

EPA essentially concedes that producers can supply the mandated volumes. Per the NOPR, for "2014 and possibly 2015 and 2016, there is no shortage of ethanol and other types of renewable fuel that could be used to satisfy the statutory applicable volume of total renewable fuel."<sup>34</sup>

EPA's statement is consistent with the facts: biofuels producers are ready, willing and able to produce 15 billion gallons of renewable fuel.<sup>35</sup> Indeed, producers like POET (the largest ethanol producer by volume in this country) built this capacity *in reliance on* this statutorily-mandated volume.

EPA is at a crossroads: EPA can honor the 15 billion gallon bargain that Congress established with biofuels producers and see continued investment in cellulosic biofuels. Doing so will create the market incentives to solve the very biofuels distribution issues that EPA is concerned about in the NOPR. By comparison, EPA's current approach in the NOPR undermines those investments. Clearly, EPA must pursue the better course, i.e., increase the Base Renewable RVOs.

- III. The Base Renewable RVOs must be significantly strengthened to maintain investment in U.S. biofuels development.
  - A. For the next fully-available compliance year (2016), the Base Renewable target must be set at the statutorily-specified level of 15 billion gallons.

POET's most significant concern in the NOPR is preserving the statutory Base Renewable target for 2016 – which (as stated above) is readily capable of being met. EPA's undermining this Base Renewable target causes significant long-term harm to the RFS, and the Base

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<sup>&</sup>lt;sup>34</sup> *Id.* at 33,113.

<sup>&</sup>lt;sup>35</sup> See e.g., Renewable Fuels Association, "Biorefinery Locations," at <a href="http://www.ethanolrfa.org/bio-refinery-locations/">http://www.ethanolrfa.org/bio-refinery-locations/</a> which identifies nameplate capacity of 15.4 billion gallons as of July 2015. See also Bruce Babcock and Wei Zhou, *Impact on Corn Prices from Reduced Biofuel Mandates*, supra, at 3-4 (stating "existing corn ethanol plants could produce more than 15 billion gallons" of ethanol).

Renewable RVO is the only one for which EPA relies on the flawed general waiver authority to reduce.<sup>36</sup>

EPA's proposed RVO targets are in the table 1 below, with the targets of greatest concern highlighted in red. Table 1 also presents how strengthened Base Renewable RVOs can be readily complied with through the increased use of E85, E15, biodiesel and banked RINs.

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<sup>&</sup>lt;sup>36</sup> Per the NOPR, the general waiver authority is "supplemental" authority for the Advanced reductions (i.e., not relied on for the Advanced reductions, which are obtained by – and slightly less than – a pass-through of the cellulosic production shortfall). Rather, EPA proposes the general waiver authority as "the sole authority for further reductions in total renewable fuel volumes" obtained by reducing the Base Renewable target. NOPR at 33,111.

**Table 1: Volume Scenarios.** 

EPA proposed RVOs	2014	2015	2016	
(Billions gallons)	(based on actual	(part based on		
	production)	actual production)		
Cellulosic biofuel	.033	0.106	0.206	
Biomass-based diesel	1.63	1.70	1.80	
Advanced biofuel	2.68	2.90	3.40	
Total Renewable fuel	15.93 (18.15)	16.30 (20.5)	17.40 (22.25)	
Base Renewable	<b>13.25</b> (14.4)	<b>13.40</b> (15.0)	<b>14.0</b> (15.0)	
(statutory volumes in parentheses)	(1.15 Bgal difference)	(1.6 Bgal difference)	(1 Bgal difference)	
RINs needed under strengthened Base Renewable target				
Revised (strengthened) Base	13.65 to 14.05	14.2 to 14.5	15.0	
Renewable RVO*	(0.4 to 0.8 increase)	(0.8 to 1.1 increase)	(statutory level)	
E10 blendwall (per EPA) 37	13.6	13.8	13.7	
E10 blendwall updated <sup>38</sup>	13.7	14.0	14.2	
RINs needed over blendwall for	0⁺ to .45	0.2 to 0.7	0.8 to 1.3	
revised Base Renewable RVO				
RINs needed over blendwall for	0' to .48	0.3 to 0.8	1.0 to 1.5	
Base Renewable + cellulosic RVOs. <sup>39</sup>				
Residual Advanced RVO (Non-BBD, non-	0.20	0.24	0.3041	
cellulosic Advanced RVO). <sup>40</sup>				
RIN supply – more than sufficient RINs available with strengthened RVOs				
Biodiesel surplus RINs	.17 <sup>42</sup>	.45	1.2	
(over biodiesel target)				
E85/E15 (ethanol gallons)	.10 to .20 <sup>43</sup>	.60	1.1 to 1.5	
Available roll-over RINs	1.8	1.0 to 1.4	1.0 to 1.4 <sup>44</sup>	

\*2014 and 2015 Base Renewable increases are indicative, appropriate increases, even under EPA's flawed approach of reducing these targets below statutory levels. The Total Renewable volume would increase commensurate with the Base Renewable increase. The 2016 Base Renewable target is increased to the statutory volume. \*Base Renewable RVO is below blendwall in certain scenarios in 2014.

<sup>&</sup>lt;sup>37</sup> See NOPR at 33,115 for EPA 2015 and 2016 blendwall figures. 2014 calculated using EPA method.

<sup>&</sup>lt;sup>38</sup> See e.g., Irwin and Good (June 3, 2015), supra.

<sup>&</sup>lt;sup>39</sup> Cellulosic target would have even less impact on E10 blendwall if most met through CNG-based RINs.

<sup>&</sup>lt;sup>40</sup> The residual Advanced target has no E10 blendwall impact (or only small impact) if satisfied (or mostly satisfied) through BBD, CNG, and drop-in biofuels rather than imported sugarcane ethanol.

<sup>&</sup>lt;sup>41</sup> EPA passing through the full cellulosic shortfall to the Advanced target could (and should) reduce the 2016 non-BBD, non-cellulosic, residual Advanced target from roughly 0.5 to 0.3 billion gallons.

<sup>&</sup>lt;sup>42</sup> FarmDoc, 2015 1<sup>st</sup> Quarter RIN update, identifies 2014 D4 net generation of 2.616 B RINs (p. 4). EPA's proposed BBD target of 1.63 Bgal equals 2.445 B RINs. This leaves a surplus of .171 billion BBD RINs. <sup>43</sup> See NOPR at 33,121 for 2014 E85 estimated range.

<sup>&</sup>lt;sup>44</sup> Volumes are conservatively based on E85. Stillwater Associates, *infra*, finds in 2016 1 Bgal in ethanol could be distributed through E15 and 2.90 Bgal ethanol delivered via E15 and E85 combined.

In short, the 2016 statutory Base Renewable Volume can be readily achieved through a combination of E15/E85 and biodiesel, and banked RINs provide an additional compliance cushion if EPA chooses to maintain a bank of carryover RINs.<sup>45</sup>

As noted on Table 1, a 15 billion gallon 2016 Base Renewable target implies that up to 1.3 billion RIN-gallons may be needed over the "E10 blendwall" to meet this target in 2016, assuming EPA "blendwall" estimates are accurate. The "blendwall gap" (the difference between the volume of ethanol in 10% of the nation's gasoline supply and the Base Renewable target/ethanol-based RINs used for compliance) may be significantly lower if EIA is underestimating projected gasoline use, which has been consistently the case recently. Nevertheless, even conservatively assuming in 2016 the need for 1.3 billion gallons of ethanol in products greater than E10, this so-called "E10 blendwall" can be readily overcome by a combination of E85 and biodiesel-generated RINs, as explained in the following paragraphs.

E85 could be scaled up to at least 1 billion gallons in 2016 at appropriate RIN prices that would have no impact on retail gasoline prices. This is not surprising, since there are approximately 16 million FFVs on the road today.<sup>46</sup>

Edgeworth Economics has determined through modelling that, under reasonable assumptions, it would be readily achievable for the market to consume 600 million to approximately 1.1 billion gallons of ethanol in E85, at RIN prices of \$0.80 to \$1.45, in 2015 and 2016.<sup>47</sup> These volumes and prices conservatively assume a 45,000 gallon-per-month throughput limit per station offering E85. POET and Stillwater Associates have independently determined that stations can sell much more than 45,000 gallons per month.<sup>48</sup> A still conservative estimate would be that a typical station dispenses twice that much E85—90,000 gallons per month. Using this higher, reasonable per-station throughput limit, Edgeworth

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<sup>&</sup>lt;sup>45</sup> POET concurs with the Growth Energy Comments that EPA should retain statutory total renewable volumes (minus the cellulosic reduction) for 2014 through 2016. POET further agrees that EPA is obligated to take carryover RINs into account when assessing supply. As a result, POET believes that it is most consistent with the statute to require obligated parties to expend carryover RINs to meet 2014 through 2016 statutory targets, but presents the alternatives outlined in this letter in case EPA chooses not to follow that approach.

 <sup>46</sup> NOPR at 33,128. EPA notes "14 million FFVs in the fleet in 2014, representing about 6% of all light-duty cars and trucks" (NOPR at 33,121), though the number of FFVs has subsequently increased.
 47 See Edgeworth Economics, *Impact of the RFS Mandate on Motor Fuel Volumes and Prices, 2014-2016* (July 2015)(Attachment 1 hereto to POET comments).

<sup>&</sup>lt;sup>48</sup> For the Stillwater Associates analysis, *Infrastructure Changes and Cost to Increase RFS Ethanol Volumes through Increased E15 and E85 Sales in 2016* (July 2015)(hereafter "Stillwater Study"), and a fuller discussion of these issues, see the Growth Energy Comments submitted to this NOPR docket.

Economics has determined that 1.5 billion gallons of additional ethanol via increased E85 could be used, at RIN prices of approximately \$1.28. Moreover, retail gasoline prices (of E10) do not change by more than 1% in any of these scenarios.<sup>49</sup>

These modeling results show how the Base Renewable RVOs for 2014 to 2016 can be increased to spur renewable fuel use, without any significant impact on increasing retail gasoline prices.

Other experts have determined similar results: E85 consumption can readily increase if EPA sets proper (and strengthened) targets that better reflect statutory volumes. For instance, Dr. Bruce Babcock similarly has found at least one billion gallons of ethanol could be consumed as E85 in 2014, even if one were to assume that no new E85 stations are built and that each existing E85 station can sell only up to 45,000 gallons per month. And since the time of his analysis, new stations have been built and more FFVs come in to use. Furthermore, using the 90,000 gallon per month station throughput limit would support 1.8 billion gallons of ethanol in E85 per year nationally. E85

Even EPA in this proposal says FFVs could consume 800 million gallons of E85 in 2016.<sup>52</sup> However, EPA seems to be lowballing its own prior (and better informed, more thorough) analysis of the ability for E85 to be deployed into the marketplace. In November 2013, EPA determined that 1.3 billion gallons of E85 could be consumed per year.<sup>53</sup> And the number of FFVs in use has increased. Furthermore, even in this prior analysis EPA appears to have

<sup>&</sup>lt;sup>49</sup> See generally, the Edgeworth Economics report attached hereto.

<sup>&</sup>lt;sup>50</sup> Bruce A. Babcock & Sebastien Pouliot, *Impact of Sales Constraints and Entry on E85 Demand*, at 3 (August 2013), available at <a href="http://www.card.iastate.edu/publications/dbs/pdffiles/13pb12.pdf">http://www.card.iastate.edu/publications/dbs/pdffiles/13pb12.pdf</a>. This analysis is still applicable today, the basic principles of which have been confirmed for purposes of these comments by Edgeworth Economics.

<sup>&</sup>lt;sup>51</sup> *Id*. at 3.

<sup>&</sup>lt;sup>52</sup> NOPR at 33.128.

Memorandum from David Korotney to EPA Air Docket EPA-HQ-OAR-2013-0479, "Application of one-in-four E85 access methodology to 2014" at 5 (Nov. 21, 2013)(hereinafter "EPA 2013 E85 Memorandum"). Although EPA calculated this number in 2013 as available distribution capacity, it then discounted this figure significantly because it was improperly seeking to project how much E85 would be consumed without the mandate. See 78 Fed. Reg. 71,762 (calculating "proposed mean volume of 180 mill gal for E85"). EPA now admits that this discounting was erroneous, *see* NOPR at 33,117 (recognizing that "the approach we took in the November 2013 NPRM underestimated achievable volumes"). But rather than following the natural result of this concession and using its previously calculated 1.3 billion gallons distribution capacity, it now ignores that it calculated this number.

significantly underestimated the availability of stations with E85 available to drivers, thus underestimating likely E85 use.<sup>54</sup>

Furthermore, on-the-ground developments show that E85 sales can rapidly scale up if EPA sets appropriate RVOs, with correspondingly appropriate D6 RIN prices. Speedway, one of the nation's largest gasoline station chains, has stated that it is adding E85 capability in every newly built station and most upgraded stations, targeting 275 E85 pumps in 2015 and the same number in 2016. Furthermore, a "number of other companies, such as Kum & Go, Kwik Trip, Thorntons, Spinx, Rebel Oil, Break time (MFA), MFA Oil, Meijer Gas, Super Pantry, Bosselman's Pump & Pantry, Kroger, Murphy, Petro Serve USA, and Road Ranger all have significant programs to increase E85 stations, such that E85 will be offered at 18 percent to more than 25 percent of each companies' stations." <sup>56</sup>

In sum, in light of the various analyses above, the volumes of E85 presented in table 1 are conservative and well within reach if EPA sets appropriate RVOs. For instance, Table 1 shows E85 volumes in the range of 1.1 to 1.5 billion gallons for 2016, based on reasonable RIN price scenarios. As explained in Growth Energy comments submitted to this docket, over 1.8 billion gallons of ethanol in E85 could be consumed in 2016, with over 2 billion gallons also feasible.<sup>57</sup>

Biodiesel alone could provide 1.2 billion surplus RINs for D6 compliance in 2016. EPA indicates there exists 2.8 billion gallons of registered biodiesel capacity, which could generate 4.2 billion RINs.<sup>58</sup> Registered biodiesel capacity is 1 thus billion gallons (1.5 billion RINs) above the 2016 1.8 billion gallon biodiesel target. Accordingly, assuming a figure of 800 million surplus biodiesel gallons (1.2 billion surplus biodiesel RINs) available in 2016 is within reason. A recent report by Stratas Advisors concluded that maximum biodiesel production capacity is in

<sup>&</sup>lt;sup>54</sup> The NOPR's estimate of 600 million gallons of E85 sold annually is based on 5% of FFVs having a station offering E85 nearby. NOPR at 33,128. Previously, EPA had estimated "the fraction of FFVs that have access to E85" to be 8.6%. EPA 2013 E85 Memorandum, *supra*, at 5. By comparison, expert analysis has found that 55% of FFVs are within 10 miles of an E85 station, allowing for ready fill-up and increased E85 use (based on 8 million out of 14.6 million FFVs located in zip codes with a geographic center within 10 miles of an E85 station). See Bruce A. Babcock & Sebastien Pouliot, *Price It and They Will Buy: How E85 Can Break the Blend Wall*, at 9-10 (August 2013), available at http://www.card.iastate.edu/publications/dbs/pdffiles/13pb11.pdf.

<sup>&</sup>lt;sup>55</sup> Stillwater Study at 15.

<sup>&</sup>lt;sup>56</sup> *Id*. at 15-16.

<sup>&</sup>lt;sup>57</sup> See the Growth Energy comments submitted to this NOPR docket ("Growth Energy Comments"), Section V.

<sup>&</sup>lt;sup>58</sup> NOPR at 33.116.

line with EPA's acknowledged registered capacity.<sup>59</sup> Furthermore, EPA places total U.S. biodiesel capacity at 3.6 billion gallons (equivalent to *5.4 billion* RINs).<sup>60</sup>

EPA previously and correctly recognized regarding biodiesel that it is "relatively straightforward for much of the current unused capacity to be brought on line, something we believe will occur once sufficient incentive is put in place" such as through RVOs.<sup>61</sup> EPA further recognized that biodiesel plants "have the ability to restart rapidly."<sup>62</sup> These facts remain true.<sup>63</sup>

In addition, domestic production capacity of renewable diesel is capable of generating about 362 million RINs per year, which provides additional compliance flexibility for meeting the Base Renewable RVO.<sup>64</sup>

Low-cost, sustainable biodiesel imports, and renewable diesel imports, could even further increase the availability of biodiesel RINs available for Base Renewable compliance.

Providing still greater compliance flexibility, E15 could also allow for the consumption of significant volumes of ethanol over the E10 blendwall. Astoundingly, without any real analysis of the impact of reasonable/statutory targets on RIN prices and E15 consumption, EPA basically ignores E15 and it is "omitted" from its calculation of potential fuel volumes. EPA's refusal to consider the potential for E15 growth betrays the agency's own experience with E10. In the past, E10 use scaled up rapidly, including with the phase-out of MTBE. Major markets have the ability to convert from E10 to E15, in terms of infrastructure, in a matter of weeks. Where dispenser upgrades are necessary to distribute E15, dispenser upgrades are low-cost

<sup>&</sup>lt;sup>59</sup> See Stratas Advisors, *Non-Ethanol Potential for RFS Compliance* (July 2015)(hereafter "Stratas Report") at 15, attached to Growth Energy Comments submitted to this NOPR docket. This report found that maximum U.S. biodiesel production capacity is sufficient to generate about 4.14 billion RINs. <sup>60</sup> NOPR at 33,116.

<sup>&</sup>lt;sup>61</sup> See EPA, "Renewable Fuel Standard Program (RFS2) Summary and Analysis of Comments," at 3-187 (Feb. 2010), available at <a href="http://www.epa.gov/otaq/renewablefuels/420r10003.pdf">http://www.epa.gov/otaq/renewablefuels/420r10003.pdf</a>.

<sup>62</sup> Id. at 3-189.

<sup>&</sup>lt;sup>63</sup> See e.g., Stratas Report at 5. There is every reason to believe the registered capacity is available. The NOPR also indicates that sufficient feedstocks are available. EPA indicates that the "combined volumes of soybean oil, corn oil, and waste oils produced annually is far more than would be needed to produce 2.1 billion gallons of biodiesel." NOPR at 33,128 (emphasis added). EPA further adds additional feedstocks from exported products are available. For instance, "in 2014 exports of soy oil were 250 million gallons and exports of rendered fats and greases was 440 million gallons." *Id.* Additional feedstock imports are also available from overseas in response to price incentives.

<sup>&</sup>lt;sup>64</sup> Stratas Report at 16.

<sup>&</sup>lt;sup>65</sup> NOPR at 33.126-27.

and can be readily deployed. Moreover, regarding underground storage tanks, DOE has determined that the "majority of installed tanks are compatible with E15." 66

Dispensing E15 can be readily done by gas stations. Stillwater Associates finds that for "the most part E10 compatible equipment is also E15 compatible." Both manufacturers of fuel dispensers fully warranty their standard dispensers for E15 usage. Stations, if their dispensers are not already compliant, would only need to purchase a retrofit kit, which costs roughly \$2,000 per dispenser including installation, in order to comply with Underwriter Laboratories listing requirements.

With respect to piping and other equipment, Stillwater explains that stations upgraded in the last five years will have already done the work to get most of their equipment E15-compatible, because since 2010, the equipment used in these upgrades has been E15-compatible, even if the station was not seeking to add E15.<sup>70</sup> It could cost these stations only \$1,000-1,500 to upgrade, on top of the retrofit kits.<sup>71</sup> Stations that last upgraded longer ago than that could incur costs of only \$7,000 to \$8,000, in addition to the dispenser retrofit kit.<sup>72</sup> If E15 is not delivered from a terminal, stations desiring to do their own blending could do so for the modest cost of \$20,000 for a blender pump and then an additional \$2,000 to for installation costs.<sup>73</sup>

Stillwater conservatively estimated that under current regulations E15 sales could generate an incremental 1.43 billion gallons of ethanol consumption annually, through sales in strategically targeted parts of the country.<sup>74</sup> Reformulated gas (RFG) markets provide a logical starting point for the rapid increase in the use of E15. Constraints on the distribution of E15 associated with EPA's failure to extend the 1 psi Reid vapor pressure (RVP) waiver to E15 do not

<sup>&</sup>lt;sup>66</sup> National Renewable Energy Labor, *E15 and Infrastructure* (May 2015), p. vi, available at http://www.nrel.gov/docs/fy15osti/64156.pdf.

<sup>&</sup>lt;sup>67</sup> Stillwater Study, at 27.

<sup>&</sup>lt;sup>68</sup> Gilbarco Veeder-Root, *Gilbarco Expands Standard Fuel Dispenser Warranty From E10 to E15* (Mar. 31, 2010), *at* <a href="http://www.gilbarco.com/us/content/gilbarco-expands-standard-fuel-dispenser-warranty-e10-e15">http://www.gilbarco.com/us/content/gilbarco-expands-standard-fuel-dispenser-warranty-e10-e15</a>. Wayne also has indicated that "Our warranty for standard dispensers covers gasoline fuels with up to 15% ethanol content." (January 14, 2014 letter to dispenser users).

<sup>&</sup>lt;sup>69</sup> Stillwater at 27; Gilbarco Veeder-Root, *Frequently Asked Questions, at* <a href="http://www.ethanolretailer.com/images/uploads/GilbarcoRetrofitKitE15(2).pdf">http://www.ethanolretailer.com/images/uploads/GilbarcoRetrofitKitE15(2).pdf</a> (explaining UL-listing issue).

<sup>&</sup>lt;sup>70</sup> Stillwater study at 27-28.

<sup>&</sup>lt;sup>71</sup> *Id*.

<sup>&</sup>lt;sup>72</sup> *Id*.

<sup>&</sup>lt;sup>73</sup> *Id*. at 29.

<sup>&</sup>lt;sup>74</sup> *Id*. at 25.

arise in areas where RFG is required.<sup>75</sup> Due to the regulations that require reduced VOC emissions, reformulated gasoline blendstock already has a low RVP. E15 sales in these areas could account for 670 million gallons of incremental ethanol consumption annually, according to an analysis by Stillwater Associates.<sup>76</sup>

Stillwater also determined that incremental ethanol consumption via E15 sales in areas that use conventional gasoline could be 880 million gallons annually outside of the summer season.<sup>77</sup> Finally, a number of terminals throughout the country sell gasoline blendstock with a low RVP. Stations close to such terminals and in states without E15 restrictions can purchase this blendstock and then use station blending to produce an E15 blend that satisfies RVP requirements, any time of year.<sup>78</sup> Stillwater conservatively estimates 60 million gallons of annual incremental ethanol consumption from this E15 pathway.<sup>79</sup>

Regarding vehicles on the road and E15 use, about 85% of miles traveled and energy consumed are by vehicles currently approved for E15 use. 80 That figure is expected to increase to about 89% in 2016. 81

<sup>&</sup>lt;sup>75</sup> The NOPR says that "Legal requirements limit ethanol content of most gasoline to 10%." NOPR at 33,113. However, one of the most relevant "limits" here is of EPA's own making: failing to extend the 1 psi RVP waiver to E15. EPA must take reasonable actions ancillary to this rulemaking to "ensure" the volumes of the RFS are achieved, and EPA should extend the RVO waiver to E15. For a fuller discussion of this issue, see POET Comments on EPA's Proposed Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards (July 1, 2013)(EPA Docket No. EPA-HQ-OAR-2011-0135), pp. 11-14, available at <a href="http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2011-0135-4462">http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2011-0135-4462</a>. See also, the Growth Energy Comments, Section V.C.4. It is worth noting that E15 does not necessarily have a high RVP. EPA clarifies in its Tier 3 rule that as "the ethanol level increases, the volatility increase caused by blending ethanol with gasoline begins to decline." EPA proposed rule, *Control of Air Pollution From Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards*, 78 Fed. Reg. 29,816, 29,938 (May 21, 2013).

<sup>&</sup>lt;sup>76</sup> Stillwater Study at 25.

<sup>&</sup>lt;sup>77</sup> *Id.* at 25. Because the RVP issue only applies during the summer ozone season, E15 can be sold in any part of the country without existing state restrictions from mid-September to the end of May. (*Id.* at 22).

<sup>&</sup>lt;sup>78</sup> *Id*. at 22-23.

Id. at 25. Stillwater reduces E15 volumes to account for the fact that about 11% of the vehicle miles traveled in 2016 will be by MY2000 and earlier vehicles that cannot use E15. As a result, the total E15 market potential is reduced from 1.60 to 1.43 billion gallons of incremental ethanol per year. Id.
 See Growth Energy comments, Section V. C.3, citing Air Improvement Resources, Inc., Analysis of Fleet Percentage of 2001+ Model Year Group In Calendar Years 2014, 2015, and 2016 (July 27, 2015).
 Id. Furthermore, in 2016 at least 150 million vehicles—65% of the total vehicle population —could consume E15 without implicating warranty issues. Id. And the number of automakers offering explicit warranty coverage for E15 continues to grow.

Implementing the E15 pathways described above in time to have an impact on 2016 consumption levels would be ambitious but feasible. Stillwater Associates identifies approximately 1 billion gallons in incremental ethanol distribution through E15 to be feasible in 2016. However, this type of rapid market conversion will only take place if RIN values are at appropriate levels, and the NOPR undermines RIN values. Given that E15 can supplement E85 distribution pathways, pursuing both E85 and the expedited expansion of E15 could enable 2.90 billion gallons of additional ethanol to be delivered in 2016. <sup>83</sup>

The oil industry told the United States Supreme Court that EPA's authorization to use E15 imposes on its members "in light of the RFS requirements, the obligation ... to introduce E15 into their systems to increase the total volume of renewable fuel." Now, reversing course from this obligation, refiners seek to evade the use of biofuels through trumped-up notions of an E10 blendwall. EPA should not enable obligated parties to evade the greater use of biofuels that Congress sought in the RFS, and EPA should more fully assess how E15 can significantly contribute to volumes of biofuels above E10 in the nation's transportation fuel supply.

It must also be noted that oil companies continue to block E15 distribution through branding agreements. This demonstrates that EPA has not yet put the proper incentives in place for obligated parties to ramp up E15 distribution. Paradoxically, EPA's NOPR undermining the Base Renewable target would reward obligated parties for their efforts to undermine the RFS. The challenges EPA cites as a basis for reducing the Base Renewable target are largely of obligated parties' own making, as they have spent years refusing to invest in renewable-fuel distribution infrastructure, and suing EPA over RFS standards, precisely to try to entrench the E10 blendwall in hopes that EPA would waive the volume requirements.

EPA suggests that ethanol producers (non-obligated parties) bear some responsibility under the statutory scheme for the inability of obligated parties to get their product to market.<sup>86</sup> These assertions by EPA regarding non-obligated parties contradict the structure of the statute. The statute places the burden on biofuel producers to produce fuel, and provides

<sup>82</sup> See Stillwater study at 26.

<sup>&</sup>lt;sup>83</sup> *Id*. at 31.

<sup>&</sup>lt;sup>84</sup> See Pet. for a Writ of Cert. 7, <u>AFPM v. EPA</u>, No. 12-1229 (U.S. Apr. 10, 2013) at 25.

<sup>&</sup>lt;sup>85</sup> See e.g., Renewable Fuels Association, *Protecting the Monopoly: How Big Oil Covertly Blocks the Sales of Renewable Fuels* (July 2014), available at <a href="http://www.ethanolrfa.org/page/-">http://www.ethanolrfa.org/page/-</a>/Protecting%20the%20Monopoly.pdf?nocdn=1.

<sup>&</sup>lt;sup>86</sup> EPA states that "obligated parties have had years to plan for the E10 blendwall and that there clearly are steps that obligated parties could take to increase investments needed to increase renewable fuel use above current levels," although "biofuel producers could also have taken appropriate measures" including "independently marketing E85." (NOPR at 33,114). The first statement regarding obligated parties is accurate; the second statement regarding biofuels producers is misguided.

relief to obligated parties in case biofuels producers fail to do so. The statute, however, does not impose any other requirements on biofuel producers, or on any entities other than obligated parties. The statute leaves it to the obligated parties to distribute their product. Ethanol producers have demonstrated the ability to produce the base renewable volumes that was asked of them. Despite their best efforts to promote biofuels, ethanol producers are not in a position to force their customers (the obligated parties) to distribute biofuels in higher quantities. Only EPA can provide the proper incentives by setting sufficiently high RVOs.

Increased gasoline consumption could also reduce the "E10 blendwall." Experts have found that "EPA could potentially increase the 2015 and 2016 ethanol mandates fairly substantially in the final rulemaking based solely on updated usage projections" (e.g., better estimates of gasoline use). With these updated assumptions, EPA could increase the 2016 Implied mandate to 14.5 B gallons (from 14.0 B gal) while maintaining the same "Conventional Mandate Gap" (e.g., the same computed E85/E15/biodiesel volumetric demand pull). Other analysis has found that under a high gasoline demand scenario, there could be "essentially no gap" between the RVO mandates and volumes of E10 and available non-ethanol fuels (such as biodiesel).

### Roll-over RINs can readily accommodate strengthening the Base Renewable RVOs.

The RIN bank provides a readily available compliance mechanism should E85/E15 and biodiesel-derived RINs fail to fully allow easy compliance with the statutory 2016 Base Renewable target — an unlikely occurrence if EPA quickly acts to set appropriate standards. Moreover, when setting targets, if EPA leaves the existing over-large RIN bank untouched, biofuels infrastructure will not be incentivized by the 2014-2016 RVOs, because obligated parties will draw down the RIN bank rather than invest in biofuels. For a further discussion of the RIN bank, see Section III.C below.

These compliance options – surplus BBD RINs, E15/E85, and banked RINs – leave plenty of headroom above the so-called E10 blendwall to accommodate, in 2014 through 2016, likely production levels of cellulosic ethanol and other domestic Advanced ethanol (e.g., sorghum). In

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<sup>&</sup>lt;sup>87</sup> Irwin and Good, *The EPA's Proposed Ethanol Mandates for 2014, 2015, and 2016: Is There a 'Push' or Not*?, supra, at 4-5.

<sup>&</sup>lt;sup>88</sup> *Id.* at 3-5. This analysis also assesses an anomaly in EIA data where gasoline use increases in 2015 but ethanol use decreases. Merely holding the ethanol inclusion/blend rate constant provides grounds for increasing projected ethanol use and the Base Renewable targets for 2015-2016 (even under EPA's flawed logic where EPA believes it can adjust renewable targets to what it considers to achieve more moderate biofuels growth than the statute otherwise requires).

<sup>&</sup>lt;sup>89</sup> See James Stock, *infra*, p. 26.

summary, readily available compliance mechanisms necessitate EPA strengthening the Base Renewable RVOs.

# B. The 2014 and 2015 Base Renewable targets must be strengthened through adjustments.

POET disagrees that the passage of time provides grounds for reducing the 2014 and 2015 Base Renewable targets to what was actually produced (from which EPA then subtracts exports). The fact that 2014 and part of 2015 have already passed presents an unfortunate fact scenario. However, the D.C. Circuit has already held that missing an RVO deadline does not relieve EPA (or obligated parties) of RVO obligations.<sup>90</sup>

EPA further notes "To varying degrees, obligated parties have been acquiring RINs since the beginning of 2014 in anticipation of the publication of final volume requirements and standards" for that year. Furthermore, given the substantial legal frailties – at least "risks" – regarding EPA's application of the general waiver authority to the 2014-2016 RVOs, obligated parties should be continuing to plan for the possibility that the statutory Base Renewable targets must be met.

EPA states that it is proposing to base the 2014 RVOs on the "number of RINs supplied in 2014 that are *expected to be available* for use in complying with the standards." The NOPR further states that "Because 2014 has passed, the final rule cannot alter" 2014 volumes of renewable fuel. However, EPA fails to recognize that the 2014 RVO can significantly impact RIN prices that can spur investment now, and the large volume of banked RINs. And certainly banked RINs are "available for use."

At a minimum, the 2014 Base Renewable target should be *increased* by the volume of D6 RINs retired due to exports, which can be readily accommodated by a modest draw-down from the RIN bank. In other words, at a minimum, EPA should add back in export volumes that EPA deducted when setting the 2014 target. Exported D6 volumes would have been used domestically had EPA timely set the 2014 Base Renewable target to incentivize the increased use of ethanol blends above E10 (such as E85 and E15). Based on POET's assessment of market

<sup>&</sup>lt;sup>90</sup> The D.C. Circuit has noted that the statute requires that EPA regulations "ensure" that transportation fuel sold or introduced into commerce "on an annual average basis, contains at least the volumes of renewable fuel" that are required pursuant to the RFS statutory provisions, and that late-issued RVOs does not relieve EPA of this obligation. NOPR at 33,108, citing <a href="Nat'l Petrochemical & Refiners Ass'n v.">NAT'l Petrochemical & Refiners Ass'n v.</a> EPA, 630 F.3d at 152-153.

<sup>&</sup>lt;sup>91</sup> NOPR at 33,108.

<sup>&</sup>lt;sup>92</sup> NOPR at 33,121 (emphasis added).

<sup>&</sup>lt;sup>93</sup> NOPR at 33,105.

dynamics, it is reasonable to assume that generally all of the exported volumes would have been used domestically had EPA timely set the 2014 RVOs at the statutory level.<sup>94</sup>

Furthermore, EPA appears to have made a basic calculation error when it reduced what it considered the "available" RINs in 2014 due to export volumes. EPA reduced D6 production volumes (from the EPA Moderated Transaction System or "EMTS") by using EIA information that puts EIA exports at 846 million gallons. However, this EIA data set includes exports that never generated a RIN in the first place, including some 370 million gallons of un-denatured ethanol. EPA wrongly assumes that RINs were generated on every gallon of exported ethanol, and thus that those RINs will be retired and "unavailable" for compliance, when in fact undenatured ethanol makes up 43% of exports. The 2014 Base Renewable RVO should be increased by at least these 370 million gallons, to account for RIN-less exports, under EPA's proposed approach to setting the RVOs for 2014. Table 1, above, shows a 2014 Base Renewable increase of at least 400 to 800 million gallons based on these export volumes.

The 2015 Base Renewable target should be similarly increased, so that the volumes are increased "every year" from 2014 through 2016. First, this 2014 Base Renewable RVO increase of 370 million gallons for undenatured exports (that never generated a RIN) should also be made to the 2015 Base Renewable target, to maintain increasing volumes "every year." <sup>97</sup> Furthermore, exports that occurred in early 2015 that would not have otherwise occurred (but for EPA failing to timely issue the 2015 RVO) should also be added to the 2015 Base Renewable

<sup>&</sup>lt;sup>94</sup> EIA has similarly found that "U.S. exports of fuel ethanol in 2014 reached their second-highest level" on an annual basis, and "given the uncertainty" surrounding RFS targets "the growth in ethanol output had two primary outlets: it can either be blended into domestic gasoline or it can be exported." EIA also found that among the key factors for determining 2015 ethanol export volumes "are the finalized levels of RFS targets for 2014 and 2015." See EIA, *U.S. Ethanol Exports in 2014 Reach Highest Level Since 2011* (March 26, 2015) available at <a href="http://www.eia.gov/todayinenergy/detail.cfm?id=20532">http://www.eia.gov/todayinenergy/detail.cfm?id=20532</a>.

95 NOPR at 33,121-22.

<sup>&</sup>lt;sup>96</sup> See RFA, 2014 U.S. Ethanol Exports and Imports: Statistical Summary (2015), p. 1, available at <a href="http://www.ethanolrfa.org/page/-/rfa-association-site/studies/2014%20U.S.%20Export-Import%20Report.pdf?nocdn=1">http://www.ethanolrfa.org/page/-/rfa-association-site/studies/2014%20U.S.%20Export-Import%20Report.pdf?nocdn=1</a>. In addition, 12.5 million gallons of denatured industrial ethanol were exported for which it is unlikely that RINs were ever generated. See also, testimony at the June 25, 2015 EPA public meeting on the NOPR by Geoff Cooper, Senior Vice President at the Renewable Fuels Association, available at <a href="http://ethanolrfa.3cdn.net/7b561fd0026e2097a7">http://ethanolrfa.3cdn.net/7b561fd0026e2097a7</a> uem6bnzre.pdf.</a>
<sup>97</sup> EPA's table in the NOPR that purports to show "Proposed Growth in Conventional Renewable Fuel" is highly misleading and inaccurate. NOPR at 33,125. First, it grossly understates 2014 actual production of corn ethanol, presumably due to EPA erroneously subtracting out exports. It also fails to show that the 2013 Base Renewable RVO is higher than that which EPA proposes for both 2014 and 2015. This chart also fails to recognize that other fuels such as biodiesel can contribute to compliance with the Base Renewable RVO. It also fails to recognize the large RIN bank.

target. Again, generally all of these exported volumes would have been used domestically had EPA set its RVOs on time. Similarly, enhanced volumes for E15/E85 use that should have been incentivized for 2015 had EPA timely issued the 2015 RVO should also be added to the Base Renewable target for that year. Based on EIA weekly production reports, the U.S. is on track to produce 14.6 billion gallons of ethanol this year, and POET expects the volume could be even higher. Generally all of these volumes would have been used domestically had EPA set the 2015 RVO at the statutory level (15 billion gallons) in a timely fashion. Table 1, above, shows a scenario where EPA raises its 2015 Base Renewable RVO to between 14.2 and 14.5 billion gallons, just under what is expected to be 2015 actual ethanol production. This shows that even under EPA's flawed approach of setting a target less than the statutory volume, the NOPR's proposed Base Renewable is still far too low and must be raised. If these increases in the 2015 Base Renewable target result in a modest draw-down of the RIN bank, this would be an appropriate use of the overlarge existing RIN bank.

## C. Roll-over RINs can readily accommodate strengthening the 2014 and 2015 standards.

EPA concedes that the RIN bank can provide a ready solution to meeting 2014-2016 RVOs. The NOPR finds that a "considerable bank of carryover RINs" exists totaling approximately 1.8 billion RINs.<sup>99</sup>

Previously, EPA has said carryover RINs *must* be counted when determining whether there is "inadequate domestic supply" for purposes of the general waiver provision. And for 2013, EPA found no basis for "reducing the national applicable volumes" because "the statutory volumes for both advanced biofuel and total renewable fuel can be met in 2013" in part by using carry-over RINs. 101 EPA's about-face and failure to account for banked RINs when setting the 2014 to 2016 RVOs – and thereby making those 2014-2016 RVOs too weak – is neither procedurally nor substantively valid. 102

<sup>&</sup>lt;sup>98</sup> Reflecting these first two adjustments, Table 1 lists a minimum increase in the 2015 Base Renewable target of 800 million gallons, just less than the 2014 ethanol export volume identified by EPA.

<sup>99</sup> NOPR at 33,108; see also 33,121.

<sup>&</sup>lt;sup>100</sup> EPA final rule, *Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program*, 75 Fed. Reg. 14,670, 14,698 (March 26, 2010)("it is ultimately the availability of qualifying renewable fuel, as determined in part by the number of RINs in the marketplace, that will determine the extent to which EPA should issue a waiver of RFS requirements on the basis of inadequate domestic supply"). <sup>101</sup> 78 Fed. Reg. at 49,795.

<sup>&</sup>lt;sup>102</sup> An agency must "provide reasoned explanation for its action," which "ordinarily demand[s] that" the agency "display awareness that it is changing position" when it does so. <u>FCC v. Fox TV Stations, Inc.</u>, 556 U.S. 502, 515 (2009). See also, <u>Motor Vehicle Mfrs. Ass'n v. EPA</u>, 768 F.2d 385, 399 (D.C. Cir.

Moreover, EPA's setting RVOs that would fail to promote obligated parties drawing down the RIN bank would undermine the growth in renewable fuels, contrary to EPA's stated goals in this rulemaking. So many carryover RINs exist (1.8 billion by EPA's count) that obligated parties need not engage in the installation of any more biofuels infrastructure in order to meet 2016 requirements. And the NOPR's proposed RVOs are so weak that biofuels infrastructure upgrades may not be made, and obligated parties may be emboldened to think that EPA may never impose meaningful RVOs.

The D.C. Circuit has determined that EPA has "reasonably decided" to not to reduce an RVO based on the availability of carryover RINs. 103 In short, banked RINs are "a relevant consideration in determining the extent to which a waiver is justified."104

As noted above, banked RINs could readily accommodate an increase in the 2014 (and 2015) Base Renewable RVOs to offset exports that would not have occurred but for EPA failing to issue the RVOs on time. EPA increasing the Base Renewable RVOs so that banked RINs would be used to offset these exports would be consistent with its past precedent and applicable case law. Banked RINs also provide a compliance mechanism, in addition to E85/E15 and BBD volumes, so that EPA can confidently set the 2016 Base Renewable RVO at the statutory volume (15 billion gallons).

### D. EPA's favoring the Advanced over the Base Renewable target is misguided and contrary to the statute.

The NOPR says renewable fuels "growth should emphasize advanced biofuels." 105 However, the statute doesn't work that way. The RFS sets separate targets for Advanced and Base Renewable biofuels. One target is not favored over the other, and thus the statutory structure does not support "emphasizing" the Advanced target to the detriment of the Base Renewable target.

POET supports advanced biofuels. POET is one of the world's leading investors in cellulosic production, with one of the first and largest commercial scale production facilities worldwide, located in Emmetsburg, Iowa. POET has also made other significant investments in advanced biofuels. For instance, POET has devoted significant resources to evaluating

<sup>1985)(</sup>Court found EPA acted arbitrarily when it failed to articulate any reasonable explanation of what factors the Administrator relied upon for deviation from its established criteria in its waiver of Clean Air Act restrictions on a methanol blend fuel).

<sup>&</sup>lt;sup>103</sup> NOPR at 33,110, citing Monroe v. EPA, 750 F.3d 909, 916 (D.C. Cir. 2014). Among other things, this case addressed EPA's use of the cellulosic waiver authority under Clean Air Act Section 211(o)(7)(D). <sup>104</sup> NOPR at 33,114.

<sup>&</sup>lt;sup>105</sup> NOPR at 33,123.

producing sorghum advanced ethanol, and POET produces corn oil used in biodiesel production.

Simply put, the statute sets a clear Base Renewable target, and provides no grounds for reducing this target, other than if there is a production shortfall (which EPA agrees does not exist) or severe economic harm (which EPA has not even alleged and certainly does not exist) under Section 211(o)(7)(A).

EPA recognizes the risk of advanced biofuels cannibalizing the market for conventional biofuels. The executive summary to the NOPR states: "Since the amount of renewable fuel that can be produced and imported is larger than the volume that can be consumed due to overall demand for transportation fuel and constraints on supply to vehicles and engines, there is necessarily competition among biofuels for retail consumption in the United States." 106

Congress addressed this potential cannibalization issue by capping the Base Renewable RVO at 15 billion gallons—but making this target *firm*. The solution Congress envisions was for the E10 blendwall to be scaled, not for EPA to promote advanced over conventional biofuels and capping ethanol at E10.

In reducing the Base Renewable target in favor of spurring advanced biofuels, EPA is making the same mistake that the D.C. Circuit rejected in its 2013 decision <u>API v. EPA</u>: ignoring a clear statutory mandate (here, the Base Renewable target) and supplanting its own policy ruminations. <sup>107</sup>

As noted above, the Base Renewable RVO provides the critical platform for the future development of advanced biofuels. In the NOPR, EPA is not only robbing Peter to pay Paul, EPA is robbing both Peter and Paul. By undercutting the Base Renewable RVO at the very moment when success is at hand and the statutory volume can be achieved, EPA is proposing to permanently undermine the RFS and destroy the future of cellulosic ethanol in the United States.

<sup>&</sup>lt;sup>106</sup> NOPR at 33,102 (emphasis added).

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<sup>&</sup>lt;sup>107</sup> See API v. EPA, 706 F.3d. 474, 479-480, also discussed *supra*.

- IV. EPA's proposed reduction of the Base Renewable RVOs cannot withstand judicial scrutiny.
  - A. The only statutory ground for exercising EPA's general waiver authority to reduce the Base Renewable target is if program implementation would cause "severe economic harm."

The general waiver authority in Clean Air Act section 211(o)(7)(A) is not complex when properly interpreted by reading its *two prongs* in conjunction with one another, whereby EPA may reduce required volumes of "renewable fuel" if:

- (i) "implementation of the requirement would severely harm the economy or environment of a State, a region, or the United States" or
- (ii) "there is an inadequate domestic supply."

It is undisputed that biofuels producers can produce an adequate domestic supply (15 billion gallons) of Base Renewable fuel. This is the only legitimate consideration when EPA evaluates domestic supply (as further discussed in the next section). Accordingly, the only statutory ground for exercising EPA's general waiver authority to reduce the Base Renewable target is if program implementation would cause "severe economic harm." The NOPR essentially concedes (by not even raising this issue) that there are no grounds whatsoever for finding that implementing the RFS would cause "severe economic harm."

Overcoming the so-called E10-blendwall is fundamentally an economic issue, not a technical or engineering issue. RIN values are needed to incentivize the use of ethanol blends such as E85/E15 (via price discounts) and the deployment of related incremental infrastructure, to allow the nation's fuel supply to diversify above blends containing 10% ethanol. The general waiver authority clearly, explicitly addresses these economic issues in the first prong of the general waiver authority—i.e., whether implementation of the RFS would "severely harm the economy." EPA cannot seek to bootstrap the fundamentally economic issues associated with the E10 blendwall into the "inadequate domestic supply" prong of the general waiver authority, when the statute already *explicitly* deals with economic issues in the very same section. And, as noted in the next section, supply means just what it seems to mean—the supply of renewable fuels from biofuels producers.

If it were ever to be found that the RFS would cause severe economic harm (highly unlikely), EPA could issue a waiver *at that time*. And EPA's maintaining an overlarge RIN bank—failing to draw down on it at all for 2014 and 2015—is unjustified given that the severe economic harm waiver provisions already provide a compliance safety valve.

# B. EPA has improperly construed the "domestic supply" prong of the general waiver authority.

EPA itself concedes that its general waiver authority is limited. The NOPR states that it would violate "the energy security and greenhouse gas reduction goals of the statute to reduce the applicable volumes of renewable fuel set forth in the statute absent a substantial justification for doing so." 108

The general waiver authority in Clean Air Act Section 211(o)(7)(A) mentions one and only one product: "renewable fuel." Regarding the "domestic supply prong of the general waiver authority, the product to which "supply" refers is renewable fuel. Plainly and simply, "inadequate domestic supply" means the ability of producers to supply renewable fuel. For the Base Renewable target there is no disagreement – and certainly nothing in the record – that suggests that biofuels producers can't supply 15 billion gallons of Base Renewable fuel.

Ignoring the plain meaning of the general waiver authority, EPA goes through a variety of legalistic contortions to somehow determine that "inadequate domestic supply" means something other than the ability of biofuels producers to produce and supply biofuels to obligated parties (e.g., to refiners). However, as EPA concedes in numerous times and ways, the entire purpose of the RFS is to spur the use of biofuels, and require—through mandates imposed on obligated parties—that the nation's fuel supply diversify. Congress designed the RFS program to motivate obligated parties to invest in biofuel distribution infrastructure, not to protect the status quo. EPA therefore cannot interpret "supply" in the general waiver authority to encompass constraints on the distribution and consumption of blended transportation fuel, as this would negate the entire purpose of the statute. A statute must not be interpreted "to negate [its] own stated purpose." 109

What is more, EPA has admitted in prior rulemakings to the Section 211(o)(7)(A) meaning of "supply" as referring solely to renewable fuel, noting that "it is ultimately the availability of qualifying renewable fuel ... that will determine the extent to which EPA should issue a waiver of RFS requirements on the basis of inadequate domestic supply." And EPA has previously said that this "supply" includes "RINs in the marketplace," such as banked RINs.<sup>111</sup>

<sup>&</sup>lt;sup>108</sup> NOPR at 33,110.

<sup>&</sup>lt;sup>109</sup> New York State Dept. of Social Servs. v. Dublino, 413 U. S. 405, 419–420 (1973).

<sup>&</sup>lt;sup>110</sup> EPA, Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 75 Fed. Reg. 14,698 (emphasis added).

<sup>&</sup>lt;sup>111</sup> *Id*.

Subsequent to EPA's last RVO proposal, the Supreme Court has admonished that "It takes some cheek for EPA to insist that it cannot possibly" give a term "a reasonable, context-appropriate meaning ... when it has been doing precisely that for decades." EPA unfortunately makes the same error here, reversing course on how it interprets the term "inadequate domestic supply." The Supreme Court further admonished EPA "We are not willing to stand on the dock and wave goodbye as EPA embarks on this multiyear voyage of discovery" and the court reaffirmed "the core administrative-law principle that an agency may not rewrite clear statutory terms to suit its own sense of how the statute should operate." 113

C. Other compliance mechanisms exist should the RIN market become unexpectedly constricted, rendering EPA's construction of the "domestic supply" prong of the general waiver authority unnecessary and contrary to the statute.

Other compliance mechanisms exist should the RIN market become unexpectedly constricted. In particular, obligated parties could carry-forward a RIN deficiency pursuant to Clean Air Act section 211(o)(5)(D). The NOPR acknowledges that Congress provided "compliance flexibility" by allowing an obligated party that is unable to generate or purchase sufficient credits to "carry forward" a RIN deficit into the next compliance year, giving the obligated party extra time to buy or develop the ability to generate more RINs. 114 The NOPR itself states that the RIN-deficit mechanism is available should obligated parties "find compliance with a given year's standards infeasible." 115

EPA's seems to have some qualms regarding possible reliance on this compliance mechanism, stating that "it may be increasingly difficult" for obligated parties to pay back RIN deficits in future years. But that is consistent with the statutory design: The increasing volume obligations Congress imposed are supposed to be "increasingly difficult" for obligated parties to comply. The answer to both the EPA and recalcitrant obligated parties is for obligated parties to make the investments needed to permit greater deployment of renewable fuel. And with the pass through of the cellulosic waiver, obligated parties attaining strengthened Base Renewable volumes is readily feasible. If severe economic harm were ever to arise from implementing the RVOs, EPA could exercise the general waiver authority at that time.

<sup>&</sup>lt;sup>112</sup> Utility Air Regulatory Group. v. EPA, 134 S.Ct. 2427, 2440 (2014).

<sup>&</sup>lt;sup>113</sup> *Id*. at 2446.

<sup>&</sup>lt;sup>114</sup> NOPR at 33,130 n. 81.

<sup>&</sup>lt;sup>115</sup> *Id*. at 33,108.

<sup>&</sup>lt;sup>116</sup> *Id.* at 33.130.

Given that Congress has already provided EPA with appropriate means of being flexible with obligated parties consistent with the overall purpose of RFS program, EPA is not free to override the statutorily mandated volumes by inventing still more flexibility via its interpretation of the "supply" prong of the general waiver authority.<sup>117</sup>

D. EPA's misguided, internally inconsistent, and illegal application of the general waiver authority would cause severe and lasting harm to the purpose and function of the RFS.

EPA's proposed approach in the NOPR, in particular the application of the general waiver authority to the Base Renewable target, would permanently undermine the RFS, and is unnecessary (See Sections I-III of these comments). At a minimum, if the Base Renewable target is not strengthened, inevitable litigation will be brought by biofuels producers that expect the statute to be respected. Litigation will delay and undercut investment in U.S. advanced biofuels and infrastructure improvements. And, with the NOPR's too-weak Base Renewable RVOs, biofuels infrastructure development would be stymied in the meantime. This would delay the will of Congress for more biofuels and much-needed fuel diversification, environmental benefits, and savings in gasoline prices at the pump. Accordingly, EPA should increase the Base Renewable targets for 2014 through 2016.

- V. The RFS program is readily capable of functioning as intended if EPA strengthens the required Base Renewable fuel.
  - A. Using the cellulosic waiver authority in Clean Air Act Section 211(o)(7)(D) provides EPA all the authority it needs to adjust volumes in the near term.

EPA's consideration of this cellulosic waiver authority has been upheld in court, and its application is relatively straightforward. Section 211(o)(7)(D) provides that (1) EPA must reduce the cellulosic target in a "year for which the projected volume of cellulosic biofuel production is less than the minimum applicable volume," and (2) EPA may also reduce the Total Renewable and Advanced requirements "by the same or a lesser volume." In this way, the amount of a cellulosic production shortfall may "come off the top" of the Total standards as well as the Advanced standard in which the cellulosic volumes are nested.

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<sup>&</sup>lt;sup>117</sup> See <u>Alexander v. Sandoval</u>, 532 U.S. 275, 290 (2001) ("The express provision of one method of enforcing a substantive rule suggests that Congress intended to preclude others."). See Growth Energy comments submitted to this docket for a full legal rebuttal of EPA's misguided attempt to misconstrue "inadequate domestic supply" as meaning anything other than the supply of renewable fuels (and banked RINs) available to obligated parties.

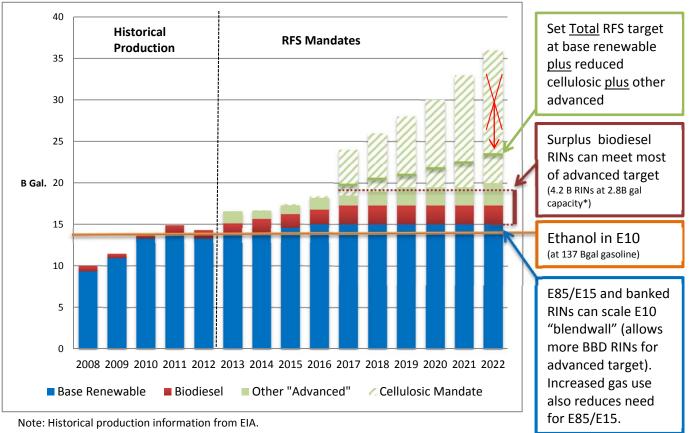
EPA requests comment on whether it "would be appropriate to *only* waive volumes of advanced biofuel and total renewable fuel under the cellulosic waiver authority for 2016" without waiving volumes under the general waiver authority. POET's answer to this question is "yes."

EPA should pass through the cellulosic waiver to the Advanced target so that the remaining gap (after domestic biodiesel production) is not so large that sugarcane imports are relied on for compliance. Imported sugarcane ethanol defeats the energy security benefits of the statute, particularly if excessive sugarcane ethanol exacerbates E10 blendwall issues.

If EPA passes through the cellulosic production shortfall, the RFS can be put on a path to success through 2022 (the last year of statutorily-specified volumes), as indicated in Figure 2 below. As indicated in this figure, the Base Renewable RVO can and should be strengthened to the 15 billion gallon statutory level by 2016 (where it remains thereafter). The cellulosic target is reduced to production levels (per the statute) going forward. The Advanced and biodiesel RVOs are at the NOPR levels for 2014-2016 (which is achievable with cellulosic waiver pass-through), with the exception that the "residual" share of the Advanced target (i.e., that which is not mandated through either the cellulosic or BBD targets) should be reduced from approximately 500 million to 300 million gallons.

<sup>&</sup>lt;sup>118</sup> NOPR at 33,123 (emphasis added).

Figure 2



\*Biodiesel 2017-2022 target capped at 2.3 Bgal for graphic (raising BBD target reduces room for "other"

advanced). Base renewable targets for 2014 and 2015 raised from EPA proposal to 14.0 and 14.5 Bgal.

POET does not take substantial issue with the NOPR's proposed numeric cellulosic targets, although defers to the comments of POET-DSM on these specific numeric cellulosic targets. There are concerns that the NOPR understates the most likely levels of saleable cellulosic ethanol production in 2016. In a word of caution, EPA should avoid being unduly conservative in setting these cellulosic targets. For instance, EPA ignores "any company projection that exceeds" EPA's "benchmark volume" for cellulosic production. In certain circumstances, this may be unduly conservative. However, to the extent that EPA takes a reasonable, fact-based approach to setting cellulosic targets, and continues to re-evaluate the best data sources in this regard, POET supports this approach.

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<sup>&</sup>lt;sup>119</sup> NOPR at 33,142.

# B. Costs to properly incentivize Base Renewable volumes do not impact retail gasoline prices and do not significantly affect oil companies.

EPA itself acknowledges that D6 RIN costs do not increase – and tend to reduce – retail gasoline prices. EPA states that "While RIN prices were significantly higher in 2013 than in previous years, we did not see, nor would we expect to see, a corresponding net increase in the overall retail price of transportation fuels across the entire fuel pool." EPA has similarly found that "An increase in D6 RIN prices ... is expected to result in a significant decrease in the price of E85" and "a very small decrease in the price of E10." 121

Harvard professor James Stock, a former member of President Obama's Council of Economic Advisers, has similarly found that there is "negligible estimated effect of RIN prices on pump E10 prices," and if anything increasing RIN price support *decreases* retail gasoline prices.<sup>122</sup>

As EPA acknowledges, studies by Informa Economics and other experts show that RIN prices do not impact retail gasoline prices. <sup>123</sup> Indeed, analysis of recent data has found that RIN price changes "did not cause changes in retail gasoline prices from 2013 through the first quarter of 2015." <sup>124</sup>

Finally, oil companies, in their securities filings, indicate that RIN issues do not pose significant concerns. For instance, it has been empirically demonstrated that oil companies "tailor their messages" by "emphasizing the cost and economic danger of regulation to regulators while telling shareholders that regulation is merely a cost of doing business with few

<sup>&</sup>lt;sup>120</sup> See EPA, "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects" (May 14, 2015)(hereafter "EPA RIN Market Analysis")(Docket ID No. EPA-HQ-OAR-2015-0111-0062), at 2. <sup>121</sup> *Id.* at 2. Backing up this analysis, EPA found that, looking at past data, the one "sharp rise in D6 RIN prices did not have a measurable impact on the prices of ethanol with attached RINs." *Id.* at. 15. <sup>122</sup> See James Stock, *The Renewable Fuel Standard: A Path Forward* (April 2015), pp. 19, available at <a href="http://energypolicy.columbia.edu/sites/default/files/energy/Renewable%20Fuel%20Standard A%20Path%20Forward April%202015.pdf">http://energypolicy.columbia.edu/sites/default/files/energy/Renewable%20Fuel%20Standard A%20Path%20Forward April%202015.pdf</a>. Stock finds that if RIN prices increase by \$1.00, "In a competitive market, the petroleum producer passes on the \$0.088 extra cost, the blender (who gets to sell the RIN) passes on the \$0.10 savings, and the consumer comes out ahead by \$0.012." So, gasoline (E10) prices go down. *Id.* at 18.

<sup>&</sup>lt;sup>123</sup> EPA RIN Market Analysis, *supra*, at 28. There, EPA noted that Informa Economics, and Scott Irwin and Darrel Good of FarmDoc Daily, assessed actual RIN retail gasoline prices and "concluded that RIN prices in 2013 did not cause higher gasoline retail prices."

<sup>&</sup>lt;sup>124</sup> Informa Economics, *Analysis of Whether the Prices of Renewable Fuel Standard RINs Have Affected Retail Gasoline Prices* (May 2015), p. 1, available at <a href="http://ethanolrfa.3cdn.net/f1c5dfa9ac9743e9f8">http://ethanolrfa.3cdn.net/f1c5dfa9ac9743e9f8</a> csm6bcb8e.pdf.

negative impacts."<sup>125</sup> In other words, oil companies have been empirically demonstrated to be misleading EPA regarding RIN price concerns.

#### **Conclusion**

EPA's application of the general waiver authority to reduce the Base Renewable targets for the 2014 to 2016 RVOs is unnecessary and unwarranted. In particular, as indicated above, the statutory 2016 Base Renewable target can be readily met. Regarding the 2014 and 2015 RVOs, even under the NOPR's flawed approach of reducing the Base Renewable targets for these two years (which does not necessarily have to rely on the general waiver authority), these targets should be strengthened through the above-described technical adjustments. The RFS program is readily capable of functioning as intended if EPA strengthens these Base Renewable targets.

EPA should also send a strong signal to the market that the 2017 Base Renewable RVO will be set at the full statutory level—15 billion gallons—the same as the statutory level for 2016, barring unforeseen circumstances. Obligated parties must understand that their ability to avoid acting to deploy renewable fuels as Congress directed is not infinite.

Harvard professor James Stock, a recent member of President Obama's Council of Economic Advisers, in an analysis of the RFS notes that "the twin climate and energy security goals of the RFS remain as valid as when the EISA was enacted." He further concludes that EPA must combine "policy clarity and commitment with a credible set of steps to expand the ethanol content of the fuel supply" as the only path that "holds out the possibility of providing economically efficient support to second-generation biofuels." POET agrees, and restates that the development of cellulosic biofuels in the U.S. will be irreparably damaged by the NOPR's proposed reduction of the Base Renewable RVOs for 2014-2016.

President Obama's recent Climate Action Plan declares that biofuels "have an important role to play in increasing our energy security, fostering rural economic development, and reducing greenhouse gas emissions from the transportation sector" and that "is why the Administration supports the Renewable Fuel Standard, and is investing in research and development to help bring next-generation biofuels on line." However, this NOPR's

<sup>&</sup>lt;sup>125</sup> See James Coleman, *How Cheap Is Corporate Talk?* (March 29, 2015), available at <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2586798">http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2586798</a>.

<sup>&</sup>lt;sup>126</sup> James Stock, *supra*, at 3.

<sup>&</sup>lt;sup>127</sup> *Id*. at 4.

<sup>&</sup>lt;sup>128</sup> See Executive Office of the President, *The President's Climate Action Plan* (June 2013), at 8, available at https://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf.

proposed targets for 2014 through 2016 are inconsistent both with the President's plan and EPA precedent.

EPA's RVO proposal would severely undermine the progress promised by the Energy Independence and Security Act. Contrary to the NOPR's reducing the Base Renewable RVOs, EPA has found that the RIN market can function "generally as expected; providing an incentive for the continued growth of renewable fuels in the transportation fuel market without causing overall increases to the retail price of transportation fuel." 129

EPA correctly states "that obligated parties have had years to plan for the E10 blendwall and that there clearly are steps that obligated parties could take to increase investments needed to increase renewable fuel use above current levels." Consistent with the above comments, the Base Renewable targets for 2014 through 2016 need to be adjusted upward, and the RFS given a chance to work as Congress intended.

Sincerely,

**Kyle Gilley** 

Senior Vice President of Public Policy and Corporate Affairs

<sup>&</sup>lt;sup>129</sup> EPA RIN Market Analysis, supra, at 31.

<sup>&</sup>lt;sup>130</sup> NOPR at 33.114.