

Denial of Petitions for Rulemaking to Change the RFS Point of Obligation

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Executive Summary

The Environmental Protection Agency (EPA) has received several petitions requesting that the EPA initiate a rulemaking process to reconsider or change 40 CFR 80.1406 identifying refiners and importers of gasoline and diesel fuel as the entities responsible for complying with the annual percentage standards adopted under the Renewable Fuel Standard (RFS) program. This “point of obligation” for the RFS program was established through a notice-and-comment rulemaking in 2010 based on the statutory direction in Section 211(o)(3)(B)(ii)(I) and (C) of the Clean Air Act (CAA) to impose the renewable fuel obligation on “refineries, blenders and importers, as appropriate,” while also “prevent[ing] the imposition of redundant obligations.” This statutory provision also allows EPA to modify the point of obligation if the designated parties are no longer appropriate. While evaluating petitions on the RFS point of obligation, EPA also evaluated whether the current obligated parties remain the appropriate obligated parties under CAA 211(o)(3)(B)(ii)(I). EPA has concluded that it is appropriate to retain the current regulatory requirement designating refiners and importers as the parties responsible for compliance with RFS standards because we again believe refiners and importers are the appropriate obligated parties.

In their initial petitions, the petitioners all asked to have the point of obligation shifted from refiners and importers, but they differed somewhat in their suggestions for alternatives. Some requested that the EPA shift the point of obligation from refiners and importers to those parties that blend renewable fuel into transportation fuel. Others suggested that it be shifted to those parties that hold title to the gasoline or diesel fuel immediately prior to the sale of these fuels at the terminal (these parties are commonly called the “position holders”), or to “blenders and distributors.” All petitioners argued, among other things, that shifting the point of obligation to parties downstream of refiners and importers in the fuel distribution system would align compliance responsibilities with the parties best positioned to make decisions on how much renewable fuel is blended into the transportation fuel supply in the United States. Some of the petitioners further claimed that changing the point of obligation would result in an increase in the production, distribution, and use of renewable fuels in the United States and would reduce the cost of transportation fuel to consumers.

On November 10, 2016, the EPA published a proposed denial of requests to initiate a rulemaking process to reconsider or change the regulations at 40 CFR 80.1406. See Proposed Denial of Petitions for Rulemaking to Change the RFS Point of Obligation, EPA-HQ-OAR-2016-0544, hereinafter “proposed denial.” The EPA solicited comment from interested stakeholders on the proposed denial. Acting on the request of stakeholders, the EPA extended the public comment period to February 22, 2017. The EPA received over 18,000 comments submitted to the docket. The EPA’s response to significant and relevant comments is provided within this document. Notwithstanding the different suggestions for shifting the point of obligation that were expressed in the initial petitions, in their comments, all petitioners suggested that the definition of “obligated party” in 40 CFR 80.1406 should be changed to put the obligation for compliance with the RFS percentage standards on “position holders.”¹

¹ The Small Refiners Coalition and others, in comment, argued in the alternative that the point of obligation could be placed on blenders if the EPA lacks the authority to place the point of obligation on “position holders.”

The Administrator is today denying all petitions seeking initiation of a rulemaking process to change the definition of obligated party under the RFS program. Our conclusion reflects consideration of the alleged benefits that Petitioners and some commenters have suggested would ensue from a change in the point of obligation, as well as negative impacts that the EPA believes would result from such a change. In our judgment, it does not appear that the record before the Agency indicates that a change in the point of obligation would result in net overall benefits to the program. In addition, however, we believe that changing the point of obligation at this time would be very disruptive to the program, and likely the fuels marketplace as well, undermining long settled expectations and the program stability and certainty that are critical to both short- and long-term success of the program. Thus, even if there were some marginal net benefits to changing the point of obligation, we believe that the disruptive effects of a change at this time would still warrant denial.

As discussed in more detail below, the current structure of the RFS program is working to incentivize the production, distribution, and use of renewable transportation fuels in the United States, while providing obligated parties a number of options for acquiring the RINs they need to comply with the RFS standards. We do not believe that the petitioners have demonstrated that changing the point of obligation would likely result in increased use of renewable fuels. Based on the information currently available to the EPA, changing the point of obligation would not address challenges associated with commercializing cellulosic biofuel technologies and the marketplace dynamics that inhibit the increase of fuels containing higher levels of ethanol, two of the primary issues that limit the rate of growth in the supply of renewable fuels today. While we do not anticipate a benefit from changing the point of obligation, we do believe that such a change would significantly increase the complexity of the RFS program, which could negatively impact its effectiveness. EPA is also not persuaded, based on our analysis of available data, including that supplied by petitioners and commenters, by arguments that merchant refiners² are disadvantaged under the current regulations in comparison to integrated refiners in terms of their costs of compliance, nor that other stakeholders such as unobligated blenders are receiving windfall profits. Finally, EPA does not interpret the Clean Air Act as authorizing it to place the point of obligation on distributors or on those “position holders” who are neither refiners nor blenders. For all of these reasons, as further described below, EPA is denying the petitions for reconsideration.

The point of obligation has been placed on refiners and importers since inception of the RFS regulatory program, in 2007. We also believe that in considering whether to embark on a rulemaking exercise to change the regulations, that it is appropriate for EPA to take into consideration the consequences of enacting a change at this time. In the short term we believe that initiating a rulemaking process to reconsider or change the point of obligation would work counter to the program’s goals by causing significant upheaval and uncertainty in the fuels marketplace. Such a dynamic would likely cause delays to the investments necessary to expand the supply of renewable fuels in the United States, and strand past investments, particularly investments in cellulosic biofuels, the category of renewable fuels from which much the majority of the statutory volume increases in future years is expected.

² Merchant refiners are those that market only a minority of the fuels they refine (and in some cases do not market any fuel), often selling the fuel to other parties at the refinery gate for distribution and marketing.

In addition, changing the point of obligation could disrupt investments reasonably made by participants in the fuels industry in reliance on the regulatory structure the agency established in 2007 and confirmed in 2010. It could also lead to restructuring of the fuels marketplace as newly obligated parties alter their business practices to avoid compliance obligations. For example, if the point of obligation were changed to “position holders,” we believe that parties who previously were “position holders” may choose to instead purchase fuel under contract “below the rack” instead of “above the rack” to avoid the overhead compliance costs associated with being an obligated party under the RFS program. We believe these changes would have no beneficial impact on the RFS program or renewable fuel volumes and would decrease competition among parties that buy and sell transportation fuels at the rack, potentially increasing fuel prices for consumers and profit margins for refiners, especially those not involved in fuel marketing.

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I. Introduction

On March 26, 2010, the Environmental Protection Agency (“EPA”) issued a final rule (the “RFS2 Rule”)³ establishing regulatory amendments to the renewable fuel standards (“RFS”) program regulations to reflect statutory amendments to Section 211(o) of the Clean Air Act (“CAA” or “the Act”) enacted as part of the Energy Independence and Security Act of 2007. These amended regulations included 40 CFR 80.1406, imposing the obligation for compliance with the RFS annual standards on refiners and importers of gasoline and diesel fuel.⁴ These entities are referred to in the RFS regulations as “obligated parties.” Beginning in 2014, some obligated parties and other stakeholders have questioned whether 40 CFR 80.1406 should be amended, and a number of them have filed formal petitions for reconsideration or revision of the definition of “obligated party” in 40 CFR 80.1406, or petitions for rulemaking to amend the provision.⁵ Those parties filing petitions for reconsideration also initiated legal challenges of the 2010 rule, alleging that new grounds have arisen enabling them to do so notwithstanding expiration of the 60-day time period generally provided under CAA 307(b) for challenges to CAA rules.⁶ These suits have been stayed pending final action by the EPA on the administrative petitions for reconsideration.

Some petitioners⁷ that challenged the rule establishing RFS standards for 2014, 2015 and 2016, alleged both that the EPA had a duty to annually reconsider the appropriate obligated parties under the RFS program and that it was required to do so in response to comments suggesting that it could potentially avoid or minimize its exercise of the inadequate domestic supply waiver authority if it did so. In a recent ruling in that litigation, the United States Court of Appeals for the District of Columbia Circuit declined to rule on the matter, and instead indicated that the EPA could address the matter either in the context of a remand of the 2014–2016 rule ordered on

³ 75 Fed. Reg. 14670.

⁴ In imposing the fundamental RFS compliance obligation on refiners and importers, the 2010 rule simply continued the practice established under the original RFS program regulations adopted in 2007. See 72 Fed. Reg. 23900 (adopting 40 CFR 80.1106). However, the 2010 rule broadened the number of regulatory parties somewhat to reflect the new EISA requirement imposing blending requirements on diesel fuel, in addition to gasoline, that is used as transportation fuel.

⁵ On January 27, 2014, Monroe Energy LCC (“Monroe”) filed a “petition to revise” 40 CFR 80.1406 to change the RFS point of obligation, and on January 28, 2016, Monroe filed a “petition for reconsideration” of the regulation. On February 11, 2016, Alon Refining Krotz Springs, Inc.; American Refining Group, Inc.; Calumet Specialty Products Partners, L.P.; Lion Oil Company; Ergon-West Virginia, Inc.; Hunt Refining Company; Placid Refining Company LLC; U.S. Oil & Refining Company (the “Small Refinery Owners Ad Hoc Coalition” or “Coalition”) filed a petition for reconsideration of 40 CFR 80.1406. On February 12, 2016, Valero Energy Corporation and its subsidiaries (“Valero”) filed a “petition to reconsider and revise” the rule. On June 13, 2016, Valero submitted a petition for rulemaking to change the definition of “obligated party.” On August 4, 2016, the American Fuel and Petrochemical Manufacturers (“AFPM”) filed a petition for rulemaking to change the definition of “obligated party.” On September 2, 2016, Holly Frontier also filed a petition for rulemaking to change the definition of “obligated party.” These parties are collectively referred to herein as “the Petitioners.”

⁶ See *Monroe Energy LLC v. EPA*, #14-1014. (D.C.Cir. 2014); *Monroe Energy LLC v. EPA*, #16-1032. (D.C.Cir. 2016); *Alon Refining Krotz Springs, Inc. et al v. EPA*. #16-1052. (D.C.Cir. 2016); *Valero Energy Corporation v. EPA*, #16-1055 (D.C.Cir. 2016).

⁷ Petitioners Valero Energy Corporation, Alon Refining Krotz Spring, Inc., et al., Monroe Energy LLC, and American Fuel and Petrochemical Manufacturers raised arguments related to the RFS point of obligation in their challenges to EPA’s rule setting the RFS percentage standards for 2014, 2015, and 2016.

other grounds, or in response to the administrative petitions.⁸ As noted above, the EPA is denying the petitions seeking a change in the definition of “obligated parties.” The EPA also is re-affirming that the existing regulation applies in all years going forward unless and until it is revised. The EPA does not agree with the petitioners in the *ACE* case that the statute requires annual reconsideration of the matter and, although the EPA has the discretion under the statute to undertake such annual reevaluations, the EPA declines to do so since we believe the lack of certainty that would be associated with such an approach would undermine success in the program.^{9,10}

It appears that the petitions for reconsideration of 40 CFR 80.1406 do not meet the statutory criteria for such petitions set forth in CAA 307(d)(7)(B).¹¹ However, for purposes of this decision document, we will treat all petitions suggesting a change in the RFS point of obligation as petitions for a rulemaking to accomplish the change(s) requested.¹² This evaluation provides a consolidated response to all petitions (however styled) and other requests we have received that seek a change in the RFS point of obligation. For the reasons stated herein, we are denying all requests to initiate a rulemaking to change the current regulation.

In considering the petitions to change the point of obligation in the RFS program, the EPA has reviewed the large amount of information submitted by the petitioners and has met with those who requested meetings and other interested parties. The EPA has also met, and heard from, other participants in the RFS program, including other obligated parties, manufacturers of renewable fuel, and fuel retailers, who are opposed to revising the regulations. The EPA received over 18,000 comments submitted on its proposed denial, and has reviewed and considered the information submitted. Many of these comments were part of mass comment campaigns, and contained similar messages; however, the EPA received approximately 350 unique comments. See Docket EPA-HQ-OAR-2016-0544. Many commenters presented similar arguments to those put forth by petitioners in their initial requests for reconsideration or rulemaking. EPA also received many comments supporting EPA’s proposed denial. Where significant new arguments or information were presented in comments, the EPA has addressed

⁸ See *Americans for Clean Energy v. Environmental Protection Agency*, 864 F.3d 691 (D.C. Cir. 2017) (“*ACE*”).

⁹ The EPA interprets the CAA to allow the designation or redesignation of “appropriate” obligated parties to occur at any time, as the phrase “as appropriate” is broad and confers significant discretion. While the statute specifies that the percentage standards must be applicable to refineries, importers, or blenders as appropriate, it does not say that EPA must annual reevaluate the matter.

¹⁰ Nevertheless, the EPA could consider changes to the definition of “obligated party” in the future, based on significant new facts or analysis. Given the time pressure associated with its annual standards rulemakings, EPA expects that any such consideration would not occur in the context of those rulemakings.

¹¹ Petitioners had an opportunity to submit comments on the point of obligation in both the 2007 and 2010 rulemakings when the current approach was adopted. The possible impact of this decision on incentivizing growth in renewable fuel use, including incentivizing growth after the clearly anticipated widespread use of ethanol at E10 levels, could have been raised in comments on those rules. Furthermore, to the extent the petitions are based on grounds arising more than 60 days after promulgation of the rule, such grounds are not a proper basis for a petition for reconsideration under CAA 307(d)(7)(B).

¹² We take no position at this time on whether petitions associated with judicial challenges to the RFS2 rule satisfy the criterion in CAA 307(b)(1) that they be “based solely on grounds arising after” the 60-day period following notice of promulgation of CAA rules, or whether the petitions for review were filed within 60 days after new grounds arose. We have considered the substance of the administrative petitions filed with the Agency whether or not the criteria specified in CAA 307(b)(1) for late challenges to Agency rules are satisfied.

those within this document. EPA also received a number of comments on the RFS point of obligation in response to its proposed 2018 RFS requirements.¹³ EPA has reviewed those comments, and where appropriate, addressed them within this document.

Who should be designated an “obligated party” under the RFS program is an issue that has generated significant debate, especially in the last few years, and one that raises complex questions about the appropriate structure of the RFS program. The various parties have presented a wide range of different information and analyses, and some have offered different interpretations of the same information and analyses. The EPA’s primary consideration here is whether or not the requested change(s) would improve the effectiveness of the program to achieve Congress’s goals, which are to increase energy security and reduce emissions of air pollutants by requiring that increasing volumes of the nation’s transportation fuel be comprised of renewable fuels. Each of the individual elements discussed in the analysis below, such as the number and nature of the parties that would become obligated if the EPA were to grant the petitioners’ requests, are considered in light of how each of these elements are expected to contribute towards or detract from the overall effectiveness of the program. EPA also has considered the impact of the current regulatory structure, and the proposed alternatives on the groups that would be regulated under these options, with the objective of determining whether the current or alternative options may be more equitable or the burdens more facily borne.

CAA 211(o)(3)(B)(ii)(I) provides that the annual renewable fuel obligations shall “be applicable to refineries, blenders, and importers, as appropriate.” The use of the term “appropriate” in determining the obligated parties provides significant discretion conferred upon EPA. *See Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015) (explaining that “‘appropriate’ is the classic broad and all-encompassing term” and “leaves agencies with flexibility”). EPA has discretion not only in determining when to modify the definition, but also under what circumstances. After consideration of the information currently before EPA, and as discussed in this document, EPA continues to believe that the point of obligation is appropriately placed on refiners and importers of transportation fuel. As expressed in Section II below, EPA believes the current designation of obligated parties is working to achieve the goals of the RFS program.

Additionally, EPA evaluated the impact of a possible change to the definition of “obligated party” on consumers, including potential impacts on fuel prices. As described in more detail below, changing the point of obligation as proposed by petitioners and other stakeholders would significantly increase the number of obligated parties in the RFS program. Many of these newly obligated parties would be smaller companies or those that do not regularly conduct business in the RIN market, who are likely to be unfamiliar with the requirements of obligated parties under the RFS program. The administrative compliance burden of the RFS obligations would likely be proportionally greater for these smaller companies than current obligated parties (relatively larger refiners and importers of gasoline and diesel) who typically employ engineers, traders, accountants, attorneys, and auditors to demonstrate and verify compliance with the RFS and other regulatory programs. It would also increase EPA’s burden in administering and enforcing the RFS program while at the same time opening up new opportunities for additional types of fraudulent behavior in a program that has already seen instances of fraud.

¹³ See Docket EPA-HQ-OAR-2017-0091.

While petitioners generally claim that changing the point of obligation would result in the increased production, distribution, and use of renewable fuels in the United States, petitioners and commenters have failed to provide data that confirms these claims. We continue to believe that changing the point of obligation would at best result in a negligible increase in the production, distribution, and use of renewable fuels in the United States, and would more likely result in a decrease in the production, distribution, and use of these fuels. The EPA is also not persuaded, based on the record before us, by arguments that, under the current regulatory structure, merchant refiners are disadvantaged compared to integrated refiners in terms of their costs of compliance, nor that other stakeholders are receiving windfall profits. The costs of the RFS program are apportioned to all refiners and importers as a function of their production volume and generally are passed on to consumers. Finally, we believe that changing the point of obligation would do nothing to incentivize the research, development, and commercialization of cellulosic biofuel technologies critical for the growth of the RFS program in future years. Each of these issues is discussed in greater detail below.

A. Relevant Parties in the Fuel Market

Gasoline and diesel fuel are produced at domestic refineries or imported to the United States. There are a wide variety of paths and associated business models by which fuel reaches consumers. Refineries distribute some of the fuel they produce by truck directly from the refinery's loading rack. Refineries generally distribute their remaining production from the "refinery gate" through pipeline, barge, or rail, to distribution terminals. This fuel may be sold by the refinery when it leaves the "refinery gate" or at a location downstream from the refinery on its distribution path. All transportation fuel produced in the United States moves through the "rack."¹⁴ The "rack" refers to the truck loading facility at a distribution terminal or refinery. Generally, wholesale purchasers, marketers or distributors receive fuel at the refinery or terminal rack and distribute that fuel to end users or retailers.¹⁵ These parties may purchase fuel upstream of the terminal rack (e.g., directly from the refinery) and handle the logistics of fuel distribution themselves. They may instead purchase fuel at product terminals (either above or below the rack), relying on the refiner or other entity to handle all of the logistics and blending requirements, generally under contract. A "rack seller" is a party who owns fuel immediately before "the rack." The Internal Revenue Service collects excise tax from rack sellers. It defines rack sellers at the refinery rack as "refiners" and rack sellers at the terminal rack as "position holders." For simplicity, we have elected in this document to refer to all parties the IRS considers to be refiners or position holders as "position holders." All subsequent references to "refiners" in this document are to parties that refine petroleum products, whether or not they are rack sellers.

¹⁴ For fuel imported into the United States, transportation fuel can move through a rack, or is tracked through registration as an "entrant."

¹⁵ The term "fuel marketers" generally refers to parties that sell fuel to distributors or end users at the rack. "Fuel wholesalers" refers to parties that buy fuel in bulk, generally above the rack, and sell this fuel to retail station owners or end users, or distribute the fuel to retail stations they own. Fuel distributors refers to parties that transport fuel from the rack (either at terminals or refineries) to retail stations. Many different parties, including refiners, can operate as marketers, wholesalers, and/or distributors depending on market conditions, and the terms overlap considerably.

Some refiners are involved in fuel distribution, blending, and/or marketing as well as refining, and these entities are referred to as “integrated refiners.” In contrast, “merchant refiners” are those that market a minority of the fuels they refine (and in some cases, do not market any fuel), often selling the fuel to other parties at the refinery gate for distribution and marketing. Most refiners engage in both practices: market a portion of their refined products, and sell fuel to other parties to distribute and market. Choices on which market segments to participate in and to what degree continually evolve over time in the industry, as profits among the various market segments likewise vary considerably over time.

“Downstream blenders” refers to parties who blend renewable fuel into gasoline or diesel fuel after the fuel has left the refinery. Downstream blending may occur at fuel terminals, bulk storage facilities, and at retail stations; in addition, renewable fuel can be “splash blended” into trucks. Blending of renewable fuel can also occur at the refinery, and this is often referred to as “upstream blending.” The term “blender” can also be used to describe parties that combine non-renewable blendstocks downstream of the petroleum refinery to create finished gasoline.

B. Overview of RFS Obligations and Compliance

Each year the EPA calculates and establishes percentage standards for renewable fuel based on the volume targets established in the CAA (which are adjusted by the EPA as appropriate using its waiver authorities), and projections from the Energy Information Administration (EIA) of gasoline and diesel consumption for the coming year. To comply, obligated parties can purchase and blend the requisite volumes of renewable fuels into the petroleum derived transportation fuels they produce or import. However, to allow the market to function more efficiently and avoid market disruption, in implementing the statutorily-required credit program, and to assist obligated parties in meeting their individual renewable fuel volume obligations (“RVOs”), the EPA established, through a transparent public rulemaking process, a system for the generation and use of Renewable Identification Numbers (“RINs”). RINs are effectively credits that are generated upon production of qualifying renewable fuel and ultimately used by obligated parties to demonstrate compliance. Renewable fuel producers and importers generate and assign RINs to the renewable fuel they produce or import, and the RINs specify by a “D-code” the renewable fuel category applicable to the fuel, as determined by the feedstock used, fuel type produced and GHG emissions of the fuel, among other characteristics.¹⁶ The assigned RINs accompany the fuel sold by renewable fuel producers and importers, and can only be separated from the fuel by

¹⁶ There are 5 different D-Codes for RINs in the RFS program. D3 RINs can be generated for cellulosic biofuel, which must be produced from cellulosic biomass and achieve a GHG reduction of at least 60%. D4 RINs can be generated for biomass-based diesel (including both biodiesel and renewable diesel) and must achieve a GHG reduction of at least 50%. D5 RINs can be generated for advanced biofuels, which are any renewable fuel (other than ethanol derived from corn starch) that achieves a GHG reduction of at least 50%. D6 RINs can be generated for conventional renewable fuels (primarily corn ethanol) that achieve a GHG reduction of at least 20%, or for fuel within the established annual baseline volume from grandfathered production facilities. D7 RINs can be generated for cellulosic diesel, which is any fuel that meets the requirements for both cellulosic biofuel and biomass-based diesel.

a subsequent owner of the fuel who is an obligated party or a renewable fuel blender. Once separated, the RINs can be freely traded as a separate commodity from the renewable fuel. Obligated parties accumulate RINs over the course of the year, either by buying renewable fuel with assigned RINs that they separate and retain for compliance, or by buying RINs that others have separated on the open market.

The annual RVOs for a given obligated party are calculated by multiplying the obligated party's total annual production and import of gasoline and diesel fuel by the four annual percent standards.¹⁷ Each obligated party must obtain sufficient RINs of each category to demonstrate compliance with its individual RVOs for the four annual standards. Compliance is accomplished on an annual average basis, through a single annual compliance report to the EPA identifying the RINs acquired and retired for that year's compliance. Thus, compliance under the RFS program requires the obligated parties to understand how to calculate their individual obligations based on the four standards, and then to plan for their annual compliance demonstration through RIN acquisition, through trading or through blending, over the course of the year. There are also associated registration, reporting and recordkeeping requirements.

C. Statutory and Regulatory History of the Point of Obligation

On July 29, 2005, Congress passed the Energy Policy Act of 2005 ("EPAct"), amending the Clean Air Act to create a statutory obligation for the use of renewable fuel in gasoline. The statute envisioned EPA adoption of annual percentage standards designed to increase renewable fuel use over time, and specified that the obligation for compliance with those standards would fall on "refineries, blenders, and importers, as appropriate." PL 109-58 August 8, 2005 and CAA 211(o)(3)(B)(ii)(I).

On September 22, 2006, the EPA published a proposed rule to establish the regulatory framework to implement the RFS program. The EPA proposed that obligated parties responsible for compliance with the annual percentage standards would be parties producing or importing gasoline: i.e., refiners and importers. The EPA specified that those blenders who only added renewable fuel to gasoline would not be obligated parties.¹⁸ The EPA noted that there were approximately 1,200 ethanol blenders, as compared to 100-200 refiners and importers and stated that making ethanol blenders obligated parties would "greatly expand the number of regulated parties and increase the complexity of the RFS program beyond that which is necessary to carry out the renewable fuels mandate under the Act."¹⁹

The EPA received comments supportive of the EPA's proposed definition of obligated parties from the Society of Independent Gasoline Marketers of American and the National Association

¹⁷ There are separate, but nested, standards for cellulosic biofuel, biomass-based diesel, advanced biofuel, and renewable fuel.

¹⁸ 71 Fed. Reg. 55552, 55573-4. Blenders who produce gasoline through combining blendstocks are considered refiners under EPA regulations and would therefore be obligated parties.

¹⁹ Ibid at 55573.

of Convenience Stores (SIGMA/NACS), ExxonMobil, Baker Commodities, Griffin Industries, Methanol Institute (MI), and the American Petroleum Institute (API). The EPA did not receive any comments suggesting a different approach.²⁰

On May 1, 2007, the EPA published a final rule establishing the regulatory RFS program. This rule, generally referred to as “RFS1”, finalized the proposed definition of “obligated party” as refiners and importers of gasoline.²¹ The program was expanded to apply to diesel fuel and otherwise significantly modified in 2007 through the Energy Independence and Security Act (“EISA”). Notably, Congress did not alter the provision specifying that compliance with the RFS percentage standards would be the responsibility of “refineries, blenders and importers, as appropriate.” In enacting EISA, Congress stated that the goals of the statute include moving the United States toward “greater energy independence and security,” and increasing “production of clean renewable fuels.”²² The amended statute established greenhouse gas emission reduction requirements for qualifying renewable fuels, and increasing annual renewable fuel volume targets to be achieved through application of annual percentage standards for four categories of renewable fuel by the EPA that also take into account the expected consumption of gasoline and diesel fuel. As was the case with EPAct, the amended statute required the EPA to establish a regulatory program, and specified that the program must include a number of program flexibilities, including a credit program for those who over-comply with the annual standards. The statute also specifically required a temporary exemption for small refineries (through 2010) that could be extended by the EPA either based on the results of a Department of Energy (DOE) study on impacts of the program on small refineries to be completed by December 31, 2008, or on a case-by-case basis upon demonstration by a small refinery of disproportionate economic hardship.

On May 26, 2009, the EPA proposed amendments to the RFS program regulations to reflect the significant statutory changes enacted as part of EISA.²³ The EPA proposed to retain the same approach to the RFS point of obligation as had been used in RFS1, but to expand it to include diesel producers and importers as obligated parties, consistent with EISA’s addition of diesel fuel as an obligated fuel. The EPA also solicited comment on two possible alternatives: (1) making blenders who add oxygenate to RBOB and CBOB obligated parties with respect to those fuels rather than the refiners and importers of RBOB and CBOB,²⁴ and (2) moving the point of obligation for all gasoline and diesel to parties who supply finished transportation fuels to retail outlets or wholesale purchaser-consumer facilities. In raising these issues for public comment,

²⁰ SIGMA/NACS commented that in the final rule the EPA should clearly distinguish between “blenders” and “oxygenate blenders” to avoid confusion or misinterpretation as to which parties have renewable volume obligations, and also urged the EPA to clarify that a party blending biodiesel into diesel fuel would not be considered a “blender” which has an RVO. In response to this comment, EPA pointed to its regulations which clearly only placed the obligation on refiners and importers that produce or import gasoline, including the limited subset of blenders who blend petroleum (i.e. non-renewable) blendstocks into finished gasoline. Regulation of Fuel and Fuel Additives: Renewable Fuel Standard Program Summary and Analysis of Comments. EPA420-R-07-006, 2-13—2-14.

²¹ 72 Fed. Reg. 23900.

²² Energy Independence and Security Act of 2007, PL 110-140, December 19, 2007.

²³ 74 Fed. Reg. 24904.

²⁴ Conventional blendstock for oxygenate blending (CBOB) and reformulated blendstock for oxygenate blending (RBOB) are produced by refineries and can be blended with 10% ethanol to produce finished conventional and reformulated gasoline respectively.

the EPA noted that the approach adopted under RFS1 was based on an expectation that there would be an excess of RINs at low cost, and that they would be freely traded between parties needing them such that obligated parties would have ample opportunity to acquire them. The EPA also explained that in adopting the approach under RFS1, the EPA had found that the designation of ethanol blenders as obligated parties would have greatly expanded the number of regulated parties and increased the complexity of the program beyond that which was necessary to carry out the fuels mandate required by the program. The EPA questioned whether, with the expanded mandates required under EISA, parties with excess RINs would tend to retain them for future compliance rather than sell them freely, and also hypothesized that most or all blenders would be regulated as RIN holders under the new program and questioned whether also making them responsible for compliance with the percentage standards could involve only a small additional burden. The EPA indicated that under the expanded program, there might be disparities in the ability of various obligated parties to acquire RINs. As a result of these considerations, and in light of the more complicated obligations required under RFS2, although proposing to retain the definition of obligated party (refiners and importers) from RFS1, the EPA also solicited comment on whether a change in that definition might be appropriate, and would more evenly align a party's access to RINs with that party's obligations under the RFS2 program.²⁵

On March 26, 2010, the EPA issued a final rule establishing the amended RFS program structure reflecting the EISA amendments.²⁶ The EPA summarized the comments it had received on the point of obligation issue, noting that some refiners favored a change from the proposed approach of retaining the obligation on refiners and importers, while others did not. In contrast to the RFS1 proposal, EPA received many differing comments from interested stakeholders on this issue. Several parties suggested that blenders or other downstream parties should become obligated parties because they control blending and that without such a change refiners and importers would find it difficult to acquire RINs. Still others suggested that the obligation should be placed on parties who supply finished transportation fuels. Downstream blenders and other downstream parties, as well as renewable fuel producers and some members of the petroleum industry, generally opposed a change, citing the burden such a change would pose to small businesses, and the added unnecessary complexity it would add to the RFS program. The EPA concluded that the concerns expressed in the NPRM and in comments suggesting a change in the definition of obligated party, did not, on balance, warrant a change, stating:

We continue to believe that the market will provide opportunities for parties who are in need of RINs to acquire them from parties who have excess. Refiners who market considerably less gasoline or diesel than they produce can establish contracts with splash blenders to purchase RINs. Such refiners can also purchase ethanol from producers directly, separate the RINs and then sell the ethanol without RINs to blenders. Since the RFS program is based upon ownership of RINs rather than custody of volume, refiners need never take custody of the ethanol in order to separate RINs from volumes that they own. Moreover, a change in the designation of obligated parties would result in a significant change in the number of obligated

²⁵ 74 Fed. Reg. 24904, 24963.

²⁶ 75 Fed. Reg. 14670.

parties and the movement of RINs, changes that could disrupt the operation of the RFS program during the transition from RFS1 to RFS2.²⁷

Nevertheless, because concerns over the liquidity of the RIN market still existed at the time, the EPA also stated that “[w]e will continue to evaluate the functionality of the RIN market [and] [s]hould we determine that the RIN market is not operating as intended, driving up prices for obligated parties and fuel prices for consumers, we will consider revisiting this provision in future regulatory efforts.”²⁸

The EPA promulgated 40 CFR 80.1406 stating that “[a]n obligated party is any refiner that produces gasoline or diesel fuel within the 48 contiguous states or Hawaii, or any importer that imports gasoline or diesel fuel into the 48 contiguous states or Hawaii during a compliance period.”

As mentioned above, in requesting that the EPA reconsider the point of obligation for the RFS program, petitioners claim that the justifications given by the EPA in the final 2007 and 2010 rules that placed the point of obligation on the refiners and importers of gasoline and diesel are no longer valid. After providing notice and opportunity for comment, and after careful review and consideration of the comments received, we disagree that a change to the RFS point of obligation is warranted, for the reasons described below.²⁹

In establishing the RFS program, Congress put in place a policy to effect a substantial transformation in the fuels market; stakeholders on all sides have strongly held views on whether and how that transformation should occur. However, nearly all stakeholders have communicated to the EPA about the desire for greater certainty and stability in the RFS program. As discussed further below, the EPA believes that a change in the point of obligation would be a substantial disruption that has the potential to undermine the success of the RFS program simply as a result of increasing instability and uncertainty in programmatic obligations.

Several commenters referenced the statutory directive that the EPA “ensure that transportation fuel . . . contains at least the applicable volume” of renewable fuel as evidence that EPA should modify the obligation if it is “hindering growth.” As discussed below in Section II., Petitioners only provided theoretical arguments that when evaluated provide no firm basis to conclude that a change in the point of obligation would lead to increased volumes of renewable fuel. In contrast, we continue to believe that the disruption to the program by changing the point of obligation would actually reduce renewable fuel volumes and that long term positive impacts, if any, would be negligible. This belief is supported in part by the fact that the shortfall at this point is exclusively in cellulosic biofuels, and a change to the point of obligation is unlikely to impact cellulosic biofuel production. For this reason, and as further discussed below, we do not believe

²⁷ 75 Fed. Reg. 14670.

²⁸ Ibid.

²⁹ Valero, in comment, suggested that EPA set an improper burden for petitioners in evaluating the petitions. They stated that they provided sufficient robust evidence to justify a change in the point of obligation. Valero specifically cited to work completed by NERA, SMU, Ron Minsk, Doug Parker, Commander Kirk Lippold, Charles River Associates, and Joe Jobe. EPA has evaluated these analyses and has concluded that they do not provide sufficient justification for a change in the point of obligation. An analysis of each of these reports is presented below in the following sections: II.B., II.C., II.E., II.H., III.B, III.C, III. D, III.G.

that a change in the point of obligation would have the positive effect suggested by Commenters, and we do not believe that the current point of obligation is “hindering growth.”

The CAA dictates that the point of obligation should be placed on refineries, importers, or blenders as appropriate. EPA has considered the petitions and comments submitted and finds, for the reasons stated herein, that refiners and importers remain the appropriate parties.

II. The Current Program Structure Appears to Be Working to Achieve the Goals of the RFS Program

Petitioners and some commenters discuss several perceived shortcomings of the RFS program. The petitioners generally attribute these shortcomings, in whole or in part, to the EPA’s decision to place the point of obligation on the refiners and importers of gasoline and diesel fuel, rather than parties downstream of the refiners and importers. These claimed shortcomings include, among others, the failure of the RFS program to achieve the statutory volumes of renewable fuel (requiring the use of EPA’s waiver authorities) and higher than anticipated RIN prices leading to higher fuel prices for consumers, negative impacts on merchant refiners, and windfall profits for unobligated blenders of renewable fuel. The petitioners conclude that the RIN market, and by extension the RFS program, is not operating as intended, and therefore the EPA should re-visit the point of obligation in the RFS program.

After reviewing the information submitted by the petitioners and commenters, along with additional information gathered by the EPA, we disagree with a number of the assertions and arguments put forward by the petitioners, and do not agree with their policy arguments that changing the point of obligation would enhance the effectiveness of the RFS program to achieve Congress’s goals. Evidence suggests that despite the necessary use of EPA’s waiver authorities in recent years, the RIN market, and the RFS program as a whole, are generally working to increase supplies of renewable fuel, albeit at a pace slower than Congress envisioned, and that a change in the point of obligation is not likely to enhance the achievement of the program’s goals. The RFS program is providing a significant incentive for the continued growth in the production, distribution, and use of renewable fuels in the transportation fuel market in the United States, and changing the point of obligation would not enhance that incentive. With the exception of cellulosic biofuels, renewable fuel production and use in the United States have increased significantly, and are projected to meet or exceed the statutory volumes for non-cellulosic biofuels in 2017. RIN prices themselves have not resulted in appreciably higher transportation fuel prices for consumers or disproportionate harm for merchant refiners.³⁰ Finally, the record does not support claims that merchant refiners have resorted to the extreme measures suggested by the petitioners, such as decreasing fuel production or exporting the fuel they produce,³¹ in an

³⁰ While RIN prices are expected to impact the price of fuels with relatively greater or lesser renewable content (increasing the price of fuels with low renewable content such as E0 or B0 and decreasing the price of fuels with high renewable content such as E85 or B20), on balance they are not expected to increase the total cost of fuel to consumers.

³¹ While gasoline and diesel exports have increased in recent years we believe that these increases are attributable to favorable crude oil and natural gas prices in the United States relative to the rest of the world, rather than an effort to avoid RIN costs. To date EPA has not been provided with evidence that demonstrates that merchant refiners

effort to minimize their RFS obligations. RINs are currently available to meet compliance needs, and we see no reason to indicate that this dynamic will change in the future.³²

A. RINs are Providing an Incentive for Increasing Renewable Fuel Production, Distribution, and Use

Since the adoption of the current RFS regulations in 2010, the RFS program has provided a significant incentive for growth in the production, distribution, and use of renewable transportation fuels in the United States. While some commenters cited EPA's use of the cellulosic and inadequate domestic supply waiver authorities to reduce the required volumes of renewable fuel in 2014-2016, as well as our May 31, 2016 proposal to use similar authorities with respect to establishing the renewable fuel standards for 2017, as evidence that the RFS program is not working effectively to achieve its stated goals, we believe that the RFS program has been generally successful at achieving these goals. First, EPA did not rely on the general waiver authority under a finding of inadequate domestic supply in the final 2017 rule, meaning that all reductions in the final rule use only the cellulosic waiver authority in 211(o)(7)(D) and are attributable to a shortfall in cellulosic biofuel production.³³ EPA has proposed a similar approach with respect to the 2018 RFS standards.³⁴ As discussed in more detail in Section III below, we do not believe that changing the point of obligation would result in an increase in the production, distribution, or use of renewable fuels beyond what is already happening based on current market incentives. Based on data collected through the EPA Moderated Transaction System (EMTS),³⁵ the production and import of renewable transportation fuel in the United States has increased from approximately 7 billion ethanol-equivalent gallons in 2010 to approximately 18.6 billion ethanol-equivalent gallons in 2016, the most recent year for which complete data are available. This represents an increase of over 165% in just six years. Importantly, EPA found no basis for reductions to the advanced and total renewable fuel requirements in 2017 beyond the reductions made under the cellulosic waiver authority due to the projected shortfall in cellulosic biofuel production relative to the statutory volume for 2017. While there are many factors that have contributed to the growth of renewable transportation fuel production and imports in the United States in recent years, including federal and state tax credits for certain types of renewable fuels and federal grants and loan guarantees for advanced biofuel

favorably situated to export fuel from the U.S. have increased exports as a result of any burden associated with the RFS program. We note that despite these higher export volumes, the supply of gasoline and diesel to the United States has not changed (see Section II.D below).

³² Based on the compliance information submitted by obligated parties for the 2016 compliance year, EPA calculated that there were over 2 billion 2016 RINs available for use in 2017 (see *Carryover RIN Bank Calculations for 2018 NPRM*). Such carryover RINs are available to obligated parties for compliance purposes, effectively supplementing the volume of RINs associated with renewable fuel production during the compliance year.

³³ Renewable Fuel Standard Program: Standards for 2017 and Biomass-Based Diesel Volume for 2018. 81 FR 8946 (December 12, 2016).

³⁴ Proposed Rule: Renewable Fuel Standard Program: Standards for 2018 and Biomass-Based Diesel Volume for 2019. 82 FR 34206 (July 21, 2017).

³⁵ RIN generation data are available publicly at <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/public-data-renewable-fuel-standard>.

production facilities, many stakeholders have regularly cited the RFS program as a primary reason for making investments in both the production and distribution of renewable fuels.³⁶

Despite these successes, in recent years the EPA has exercised the statutory waiver authorities to reduce the renewable fuel volumes from those specified in the statute, largely due to the shortfall in cellulosic biofuel production.³⁷ While the EPA relied on the use of the general waiver authority in 2014-2016, reductions in the 2017 final rule and proposed 2018 rule were made using only the cellulosic waiver authority. Reductions using the cellulosic waiver authority in 2017, and those proposed for 2018, can be attributed to lower production of cellulosic biofuels than envisioned by Congress resulting from challenges experienced with the development and commercialization of cellulosic biofuel production technologies. The projected production and use of non-cellulosic renewable transportation fuels in 2017 and again in 2018 meets or exceeds the volume envisioned by Congress in EISA.³⁸ Similarly, required biodiesel volumes for 2017 are 100% greater than the statutory prescribed minimum volume, and for 2018 the required volume is 110% greater than the statutory minimum.³⁹ The petitioners generally focused on the limitations to the distribution and use of renewable fuels, claiming that changing the point of obligation would address these limitations and allow for greater volumes of renewable fuels to be used. We note, however, that these issues were not the basis for reducing the RFS standards in 2017, nor for the proposed reductions in 2018. In the rule establishing the renewable volume obligations for 2017, and again in our proposed rule for 2018, the EPA determined that the supply of conventional biofuel is sufficient to meet the implied statutory target of 15 billion gallons. We also found that the supply of non-cellulosic advanced biofuels was sufficient to meet or exceed the implied statutory requirements for these fuels.⁴⁰ As discussed further below, the primary factor limiting the production of cellulosic biofuels, including cellulosic ethanol, is the slower than expected development and commercialization of technologies that can reliably and economically produce these fuels.

Some commenters suggested that changing the point of obligation would provide benefits to the cellulosic biofuels industry, whereas other comments agreed with EPA's proposed assessment that changing the point of obligation would not positively impact the cellulosic biofuel industry.

³⁶ For example, see comments on the proposed RFS standards for 2017 from the National Biodiesel Board, EPA-HQ-OAR-2016-0004-2904; and Dana Gustafson of Marquis Energy, EPA-HQ-OAR-2016-0004-3498; and a Letter from RaceTrac to Administrator McCarthy, received August 17, 2016.

³⁷ For a full discussion of EPA's waiver authorities see the preamble to the Final Rule establishing the 2014-2016 RFS standards (80 FR 77420, Dec. 14, 2015).

³⁸ The statutory volumes for total renewable fuel, advanced biofuel, and cellulosic biofuel in 2017 are 26.0, 11.0, and 7 billion gallons respectively. Therefore, the implied statutory targets for conventional biofuel (the difference between the required volumes of total renewable fuel and advanced biofuel) and non-cellulosic advanced biofuels (the difference between the statutory volumes of advanced biofuel and cellulosic biofuel) are 15.0 billion gallons and 4 billion gallons respectively. The volumes proposed by EPA in our July 2017 proposed rule for 2018 for total renewable fuel, advanced biofuel, and cellulosic biofuel are 19.24, 4.24 and 0.238 billion gallons respectively, with an implied volume of 15.0 billion gallons of conventional biofuel and 4 billion gallons of non-cellulosic advanced biofuel.

³⁹ Compare CAA 211(o)(2)(B)(v) (1 billion gallon minimum) with the required volumes of 2.0 and 2.1 billion gallons of biomass-based diesel in 2017 and proposed in 2018 respectively.

⁴⁰ EPA calculates the implied statutory target for non-cellulosic advanced biofuels by subtracting the statutory volume for cellulosic biofuel from the statutory volume for advanced biofuels for each year.

These comments are discussed in more detail in Section III.F below. However, overall the EPA does not find the arguments for moving the point of obligation in an effort to support the cellulosic biofuel industry convincing. The proposed cellulosic biofuel volume for 2018 is just 3.4% of the statutory volume (i.e., 238 million ethanol-equivalent gallons expected production compared to a statutory volume of 7 billion gallons). Furthermore, the vast majority of the cellulosic biofuel currently produced is biogas rather than liquid cellulosic biofuels. The RFS program, operating under the existing regulations, has been demonstrably effective at making significant progress towards achieving the statutory goals, and in some cases exceeding these goals. The challenges to further growth in the commercial scale production of cellulosic biofuels and the infrastructure necessary to facilitate additional biofuel use, particularly liquid cellulosic biofuels, are not related to the point of obligation under the RFS program, but rather are the result of research, development, and production challenges described in detail in the final rules establishing the standards for 2014-2017 and in the proposed rule to establish standards for 2018.⁴¹ Beyond 2018, 90% of the growth in the statutory RFS volumes is intended to be cellulosic biofuel, with the remainder of the growth coming from non-cellulosic advanced biofuels. Because the statutory design of the RFS program provides limited incentives to obligated parties to invest in the development of cellulosic biofuels (since the statute requires that the cellulosic biofuel volume be set equal to the volume projected to be produced in any given year if this volume is lower than the statutory volume, and also allows the use of cellulosic waiver credits rather than RINs in years with such a reduction), it is unlikely that changing the point of obligation as requested by the petitioners would result in increased investment in cellulosic biofuels by the obligated parties under their proposals. As discussed further in Section III.F, and based on evidence presented by petitioners, and the information before the agency at this time, changing the point of obligation of the RFS program is unlikely to address the significant challenges associated with the commercialization of cellulosic biofuel, as these challenges are associated with the economic production of cellulosic biofuels at commercial scale rather than the distribution and use of cellulosic biofuels, and would not be expected to benefit the production, distribution, and use of non-cellulosic transportation fuel in the United States, as detailed further below.⁴²

B. Current RIN Prices Are Not Indicative of a Dysfunctional RIN Market

One of the issues cited by the petitioners as evidence that the RIN market, and more generally the existing RFS regulations, are not operating as intended is the current price of RINs, which some petitioners have characterized as being indicative of a dysfunctional RIN market.⁴³ As discussed in a memorandum prepared in support of the proposed RFS annual standards for 2014-

⁴¹ 80 FR 77420 (Dec., 14, 2015), 81 FR 89746 (December 12, 2016) and 82 FR 34206 (July 21, 2017).

⁴² As discussed in more detail in Section III.C below, changing the point of obligation is also not expected to significantly impact the market dynamics currently limiting the distribution and use of E85.

⁴³ Some commenters suggested that when described in RFS1 and RFS2, RINs were a compliance mechanism only, and not described as a means to effect change in the marketplace. EPA notes that while RINs were designed to provide flexibilities, as the costs associated with increasing renewable fuels in the marketplace has increased, it is logical for RIN prices to increase as well. While at the time the RIN system was created, and the standards were essentially non-binding, RINs played solely a compliance role, but that naturally changed as the standards became more difficult to meet.

2016, the EPA does not believe that the D6 RIN prices⁴⁴ observed in recent years are indicative of a dysfunctional RIN market.⁴⁵ Rather, there are structural reasons why D6 RIN prices increased. In 2013 the required volumes under EPA's RFS standards exceeded levels that could met via the relatively simple blending of 10% ethanol into gasoline (in addition to the blending of other biofuels such as biodiesel). Increased demand for RINs (due to higher standards), and the comparative difficulty of increasing the supply of RINs through the blending of ethanol at levels *beyond* 10% (or alternatively the purchase of more expensive non-ethanol renewable fuels) drove D6 RIN prices higher. Rather than reflecting a dysfunctional RIN market, higher RIN prices simply reflect the increasing cost of supplying additional renewable fuels to the marketplace through higher level ethanol blends and/or non-ethanol renewable fuels along with the increasing demand for RINs that results from higher RFS standards.⁴⁶ In other words, higher RIN prices reflect the greater degree of difficulty (and cost) of getting ever-greater volumes of renewable fuel into the transportation fuel pool – the explicit goal of the RFS program.⁴⁷

EPA does not believe that changing the point of obligation would significantly impact the economics of selling E85 or non-ethanol renewable fuels, nor would it significantly impact the supply of available RINs (for reasons discussed below). We therefore do not believe that changing the point of obligation would be likely to result in lower D6 RIN prices than would be expected to occur with the existing point of obligation, nor would such a change result in D6 RIN prices comparable to those observed in 2012 or earlier. The price of RINs will continue to vary in the marketplace in response to a variety of factors.

Several commenters disputed the EPA's statement in the proposed denial of petitions seeking a change in the RFS point of obligation that the observed RIN prices were not indicative of a dysfunctional RIN market. For example, one petitioner submitted a paper alleging significant friction in the RIN market related to the current point of obligation.⁴⁸ This paper cites several factors they claim are the sources of high friction in the RIN market: high RIN transaction costs (indicated by high bid-ask spreads), high RIN price volatility (which may be a sign of an illiquid market), poor availability of information on RIN prices, differing levels of access to renewable fuels and/or markets for renewable fuel blends among obligated parties, and the potential for RIN market manipulation.

⁴⁴ Renewable fuel producers generate different types of RINs, depending on a number of factors including the feedstocks and production processes they use to produce renewable fuels, the type of fuel they produce, and the GHG reductions for these fuels relative to the gasoline and diesel fuel they replace. D6 RINs are generated for conventional biofuel, the vast majority of which is corn ethanol, with some additional D6 RINs being generated for biodiesel from grandfathered facilities and other fuels. Prior to 2013, D6 RIN prices were generally less than 5 cents per RIN. D6 RIN prices rose significantly in 2013, and have remained higher than the prices observed prior to 2013.

⁴⁵ See "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effect," Dallas Burkholder, Office of Transportation and Air Quality, US EPA, May 14, 2015, and Letter from API to EPA Administrator McCarthy, August 18, 2016.

⁴⁶ Uncertainty, whether related to the level of the RFS standards for any given year or the RFS program as a whole, can further serve to increase the volatility of RIN prices in the market. Some volatility may be inevitable, but increased volatility could be one outcome of changing the point of obligation.

⁴⁷ We note that RIN prices are influenced by a variety of factors, including underlying commodity market prices such as corn, ethanol, oil, and gasoline prices. Another factor influencing their price, as described, is the level of the standard and the ease with which higher-level ethanol blends can be produced and used in the market.

⁴⁸ Charles River Associates *RINs Market Frictions and the RFS Point of Obligation*, February 2017.

After reviewing this paper, the EPA has concluded that a number of the claims made by the authors are not well supported by the data presented, while other issues highlighted by the authors would be unlikely to be significantly impacted by a change in the point of obligation. The authors present no data to support their argument that RIN transaction costs are high, nor do they present a compelling argument as to why changing the point of obligation would be expected to lower transaction costs. Instead, the commenter simply suggests that the historical volatility of RIN prices is evidence of the high transaction costs and the relative thinness of the RIN markets.⁴⁹ While the EPA does not have access to data on RIN transaction costs we have no reason to suspect that they are unreasonably high. Data published by EPA on our public website refutes the suggestion that there is thinness in the RIN market. For the 2014 compliance year, the most recent year for which RIN trade data are publicly available, there were over 50 billion RIN transactions.⁵⁰ We believe that the price volatility observed in the RIN market is the result of a number of factors including volatility in underlying commodity pricing, the statutory design of the RFS program, which requires RVOs to be adjusted annually, uncertainty related to legal challenges to the annual volume obligations, and the challenges associated with increasing the consumption of renewable fuel volumes beyond the E10 blendwall. The EPA also disputes that there is poor availability of information on RIN pricing. The EPA is aware of at least two subscription services (Oil Price Information Service and Argus) and one free price report (Progressive Fuels Limited) that report daily RIN price information, including the bid/ask prices and in the case of Argus the RIN trade volumes. Other issues raised in this report, such as the relative inelasticity of the supply of RINs due to the very small markets for E15 and E85, the contractual relationship between refiners and branded stations, and the lack of availability of RIN holding and trade information due to CBI constraints are not expected to be impacted by a change in the point of obligation in the RFS program.⁵¹

One petitioner also implies that higher RIN prices lead to higher fuel prices for consumers.⁵² When D6 RIN prices first rose substantially in 2013, attention turned to whether and how such RIN price increases affect consumer fuel prices. The EPA assessed this issue using available data and concluded that while increasing RFS standards may increase transportation fuel prices if renewable fuels are more expensive than the petroleum fuels they replace on an energy-equivalent basis, *RIN prices themselves* were not expected to have a significant impact on retail fuel prices.⁵³ External, non-EPA assessments similarly concluded that increased RIN prices had

⁴⁹ A thin market is one in which the trading volume is relatively low and/or there are a relatively low number of buyers and sellers.

⁵⁰ See Annual RIN Sales/Holdings Summary on EPA public website: <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/annual-rin-salesholdings-summary>.

⁵¹ See Section III.B – III.D for a further discussion of the anticipated impacts of changing the point of obligation on the sales of renewable fuels and renewable fuel blends. The contractual relationships between the refiners and retail stations, which can include fuel purchase restrictions, sales volume requirements, requirements on the number of grades of gasoline which must be offered, etc. predate the RFS requirements and are therefore unlikely to change substantively if the point of obligation is changed. Finally, RIN holding and trade information is generally claimed as confidential business information (CBI), and this would likely be the case regardless of whether the obligated parties are refiners and importers or if they are “position holders” or blenders.

⁵² Valero Petition for Rulemaking, June 13, 2016. Page 18.

⁵³ “A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effect,” Dallas Burkholder, Office of Transportation and Air Quality, US EPA. May 14, 2015.

not had a significant impact on retail gasoline (E10) prices.⁵⁴ When RIN prices rise, the market price of the petroleum blendstocks produced by refineries also rise to cover the increased RIN costs, in much the same way as they would rise in response to higher crude oil prices. The effective price of renewable fuels (the price of the renewable fuel with attached RIN minus the RIN price), however, *decreases* as RIN prices increase. When renewable fuels are blended into petroleum fuels these two price impacts generally offset one another for fuel blends such as E10 with a renewable content approximately equal to the required renewable fuel percentage standard. Higher RIN prices also generally result in higher prices for fuels with lower renewable content (such as E0 or petroleum diesel) and lower prices for fuels with higher renewable content (such as E85 or B20). The cost of the RIN therefore serves as a cross-subsidy, reducing the price of renewable fuels and increasing the price of petroleum based fuels in transportation fuel blends, thus incentivizing increased blending of renewable fuels into the transportation fuel pool. In this way the RINs also help provide a price signal to consumers to help achieve the Congressional goals of greater renewable fuel production and use. Fuels with higher renewable content are relatively cheaper to consumers than they would be absent high RIN prices, while fuels with lower renewable content are relatively more expensive when RIN prices are high.⁵⁵ The higher the RIN prices are, the more significant the potential price discounts for fuels with higher renewable content. This retail price discount for fuels with a relatively high renewable content is enabled by higher prices for fuel blends with little or no renewable fuel content.

C. The Current Regulations do not Appear to Disproportionately Impact Merchant Refiners or Provide Windfall Profits for Unobligated Blenders

In requesting that the EPA change the point of obligation petitioners claim that the current point of obligation negatively impacts refiners that do not blend renewable fuels and/or do not sell fuel at the rack. They generally claim that this negative impact is due to these refiners incurring a high cost for RINs purchased to comply with their RFS obligations. They contrast this with what they say is the situation facing integrated refiners, whom they state are acquiring RINs for free by blending renewable fuels. Petitioners also argue that unobligated fuel blenders (such as large retail fuel chains or fuel distributors and refiners that market more fuel at the rack than they refine or import) are selling excess RINs and generating windfall profits. Several other parties have submitted documents to the EPA disputing these claims.⁵⁶

⁵⁴ Knittel, Christopher R., Ben S. Meiselman, and James H. Stock. The Passthrough of RIN Prices to Wholesale and Retail Fuels Under the Renewable Fuel Standard. Working Paper 21343. NBER Working Paper Series. Available online <<http://www.nber.org/papers/w21343.pdf>>.

⁵⁵ Even when RIN prices are relatively high fuels with high renewable content may not be cheaper than fuels with lower renewable content on an energy-equivalent basis. For example, despite relatively higher RIN prices since 2013, the national average price discount for E85 relative to E10 has never reached or exceeded 22% (the price discount needed for achieve parity between E85 and E10 on an energy equivalent basis). See also “A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects,” Dallas Burkholder, Office of Transportation and Air Quality, U.S. EPA, May 2015. and “An Assessment of the Impact of RIN Prices on the Retail Price of E85,” Dallas Burkholder, Office of Transportation and Air Quality, U.S. EPA, November 2015.

⁵⁶ See Letter from RaceTrac to Administrator McCarthy, August 17, 2016; Letter from QuikTrip to Administrator McCarthy, August 17, 2016; Presentation from Murphy USA to EPA, August 16, 2016.

We have assessed the data available on this issue and believe that the data do not support the petitioners' arguments. We believe that merchant refiners are generally not uniquely adversely impacted (relative to integrated refiners). Our reasons for not believing that merchant refiners are uniquely impacted by the RFS program are summarized below.⁵⁷

To understand why this is the case, we must consider the fundamental argument about cost disparities that petitioners and merchant refiners present to the EPA. Several merchant refiners argue that due to their position in the market as refiners with little or no blending and/or sales of fuel at the rack, their sole RFS compliance option is to purchase unattached RINs (that is, RINs that have already been separated from renewable fuel). Merchant refiners typically purchase these RINs on the market and retire them for compliance purposes; a large merchant refiner can spend considerable sums to purchase these RINs, and they typically point to these sums as an expenditure that represents a net cost to the company.⁵⁸ Some merchant refiners then argue that their integrated refiner competitors, by contrast, do not face such costs, arguing that integrated refiners acquire RINs "for free" when they purchase renewable fuel with an attached RIN. They argue that this dynamic results in a fundamental inequity between two types of RFS obligated parties: those that pay large sums to acquire RINs on the open market, and those that obtain RINs "for free." Moving the point of obligation, petitioners argue, would help address this inequity. To understand why this argument is flawed, it is helpful to examine the underlying market dynamics in more detail.

It is indeed the case that for the RVO associated with the production volumes they do not market, merchant refiners generally acquire the RINs necessary for compliance with their RFS obligations by purchasing separated RINs, rather than purchasing renewable fuel with assigned RINs. Because of this, merchant refiners are therefore able to directly track the costs associated with acquiring the RINs they need for compliance and cite these costs in their financial and accounting statements. When RIN prices are relatively high these apparent costs can be significant, especially for merchant refiners that refine large volumes of obligated fuels.

Less obviously apparent, however, is *the impact of the RFS program on the market price for the petroleum blendstocks that merchant refiners sell*. In addition, as discussed further below, all refiners and importers of gasoline and diesel fuel destined for the domestic market incur costs to comply with RFS obligations. This is true whether the refiners and importers acquire RINs by blending renewable fuels (in which case they realize a cost when they sell blended fuels for a lower price than the weighted average of the petroleum blendstocks and renewable fuels that comprise the blended fuel) or purchasing separated RINs – meaning no fundamental inequity exists.⁵⁹ Moreover, because all refiners and importers have RFS obligations in proportion to the fuels they produce or import, they all have similar per gallon costs of compliance related to the RFS program, and they all seek to recover those costs through the pricing of their products, whether that product is blended with renewable fuel and sold at a terminal or is unblended

⁵⁷ For further detail see "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effect," Dallas Burkholder, Office of Transportation and Air Quality, US EPA. May 14, 2015.

⁵⁸ For example, see comments from CVR Energy on the 2017 RFS standards proposed rule, EPA-HQ-OAR-2016-0004-0213.

⁵⁹ The issue of whether or not integrated refiners and other unobligated blenders acquire RINs "for free" or at a reduced cost is addressed more fully later in this section.

petroleum blendstocks sold at the refinery gate. Stated another way: merchant refiners can indeed expend significant funds to purchase RINs needed to demonstrate compliance with the RFS program, but the cost is offset by a corresponding increase in the market price of the fuel they sell that is attributable to the RFS obligations. The market price they receive for the gasoline and diesel fuel they sell reflects the cost of RINs. While high RIN prices increase the market price of petroleum blendstocks, they generally do not increase the market price of fuels blended with renewable fuels, as the blenders use the value of the RIN to reduce the price of the blended fuels. The same dynamic applies to all gasoline blendstocks and diesel fuel produced by both merchant and integrated refiners alike. Further, many merchant refiners blend a portion of the gasoline and diesel they produce with renewable fuels and directly market this fuel (while selling the majority to other parties for marketing), while many integrated refiners sell a portion of the gasoline and diesel they produce as unblended blendstocks to other fuel marketers. There are not two prices in the market for petroleum fuels based on whether or not they are intended to be marketed directly to consumers or sold to a downstream marketer, but rather separate prices for petroleum blendstocks and blended fuels.

The EPA also examined the available data to assess whether or not obligated parties that acquire RINs by purchasing separated RINs, rather than blending renewable fuels, are able to recover the cost of these RINs in the price of the petroleum blendstocks they sell. In their petition, Valero acknowledges this ability for refiners to recover the cost of acquiring RINs through higher prices for gasoline and diesel they produce than would be the case with lower RIN prices.⁶⁰ Empirical data also support this argument. Data clearly show higher market prices for RFS-obligated fuels (gasoline and diesel blendstocks sold for use in the United States) when compared to those of unobligated fuels that are very similar (such as gasoline and diesel sold for export, or heating oil and jet fuel).⁶¹ Before accounting for any potential RIN price impacts, one would expect obligated and unobligated fuels to have very similar market prices because of their very similar fuel properties. Gasoline is nearly identical whether used domestically or sold for export, and heating oil and diesel are also very similar chemically. However, in recent years, as RIN prices have become elevated, data show a gap opening up between the price of domestic gasoline and exported gasoline, and between the price of diesel and heating oil. The price of the obligated fuels is higher and the gap corresponds, for the most part, with RIN prices. Obligated parties – whether they are merchant refiners or integrated—are charging more for domestic gasoline and diesel to ensure they recoup the costs associated with RIN prices. So while a merchant refiner is directly paying for the RINs they buy on the market, they are passing that cost along in the form of higher wholesale gasoline and diesel prices.

Several commenters submitted assessments of the fuels market disputing the EPA’s claim that merchant refiners were generally able to recover the cost of RINs through the higher prices for the products they sell. Some of these studies referred to this as an inability to “pass-through” the cost of the RFS program to consumers. After careful review of the information submitted, the EPA does not find these assessments convincing. All obligated parties, including merchant

⁶⁰ Valero Petition for Rulemaking, June 13, 2016. Page 18.

⁶¹ See "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effect," Dallas Burkholder, Office of Transportation and Air Quality, US EPA. May 14, 2015 and Letter from QuikTrip to Administrator McCarthy, August 17, 2016.

refiners, are generally able to recover the cost of the RINs they need for compliance with the RFS obligations through the cost of the gasoline and diesel fuel they produce.

Some of these assessments submitted or referenced in comments simply assumed that RIN costs were not recovered by merchant refiners and/or were not experienced by integrated refiners or other parties that acquire RINs by blending.⁶² As discussed above, these assumptions are unfounded, as they ignore the complexities of the fuels market and the various ways costs are recovered and/or experienced as a result of the RFS obligations. Other assessments attempt to examine blender margins as a means of determining whether or not the cost of RINs are recovered by merchant refiners, or alternatively if the value of the RINs are passed on to consumers or withheld by blenders.⁶³ While examining correlations between RIN prices and estimated blender margins may provide some level of indication about the ability for the blenders to withhold some portion of the RIN value, we do not believe these assessments can be used to draw definitive conclusions on the degree of RIN passthrough in the marketplace, as there are many other factors that impact blender margins other than RIN prices that were changing simultaneously and were not addressed in the study.⁶⁴ Finally, one commenter presented an argument that integrated refiners would have an incentive to attempt to prevent the value of the RIN from being reflected in the wholesale prices of gasoline and diesel.⁶⁵ This comment effectively argued that parties that purchase bulk quantities of gasoline blendstock (such as unobligated blenders or refiners that market more fuel than they refine) would be incentivized to keep the purchase prices of these products low. It does not, however, address why the parties would be effective in negotiating sales prices that do not reflect the value of the RIN.⁶⁶ The

⁶² See, for example, Baker & O'Brien *Impact of RINs on Merchant and Integrated Refiners*, October 28, 2016 and comments by CVR Energy (EPA-HQ-OAR-2016-0544-0396). We also note that the calculations cited by CVR Energy in the DOE Study at B-5 not only simply assume that refiners that purchase separated RINs do not recover the cost of the RINs, but also erroneously assume that refiners that blend ethanol into gasoline retail the full value of VEETC tax credit, which expired at the end of 2011. The value of this tax credit is responsible for the majority of the advantages claimed by the commenter for refiners that blend ethanol vs. those that buy RINs to meet their RVO.

⁶³ See, for example, Charles River Associates *Evaluating the Response of Blender Margins to RIN Price Changes*, February 2017.

⁶⁴ For example, the local market demand vs. supply (whether the local market is short or long on gasoline) can have a significant impact on blender margins. We further note that this study did not consider data prior to 2013, which would have allowed for consideration in the variability of blender margins during a time when RIN prices were very low.

⁶⁵ See Comment from Bob Neufeld, Neufeld Consulting LLC, EPA-HQ-OAR-2016-0544-0272.

⁶⁶ In his comments Mr. Neufeld effectively assumes that parties that purchase gasoline and diesel at wholesale will be able to set the market price at a level that does not reflect RIN costs. EPA believes this is highly unlikely. The only evidence Mr. Neufeld presents to support his arguments are several calculations contained in a powerpoint presentation (also submitted in his comments on the proposed denial). We believe there are several fundamental flaws in the calculations presented in this document. First, in his calculations Mr. Neufeld uses E10 and BOB prices from Mitchell, South Dakota but ethanol prices from Chicago. This is highly problematic as the relevant ethanol price for these calculations is the price in Mitchell, South Dakota, which may be higher than the price in Chicago. This is particularly important when the relevant margins are only a few cents. Mr. Neufeld also ignores any blending costs that would be realized by parties purchasing ethanol and BOB separately but not by parties purchasing blended E10. In comparing blending margins between marketers/retailers and obligated refiners he assumes that integrated refiners receive the market price for BOBs, which is not the case if they are selling blended fuels (rather than BOBs) and retaining the RINs for compliance purposes. Finally, we note that any assessment focusing on a single location may not adequately represent the full economics of a national level program.

wholesale price of gasoline and diesel is determined by the relative supply and demand of these products, and the supply curves for refined products reflects all relevant costs, including crude oil costs, labor and capital costs, and RFS compliance costs.

The EPA also received numerous comments from a variety of stakeholders, including refiners, retailers, and academic researchers supporting our assessment that merchant refiners generally recover the cost of the RINs they purchase through higher prices for the petroleum based fuels they produce.⁶⁷ Along with the assessments cited in the discussion above, we believe two related papers by Knittel et al and a paper prepared by Argus Consulting Services, all of which were submitted in comments to our proposed denial, present compelling evidence that merchant refiners are able to recover the cost of RINs.⁶⁸ All of these papers examined the wholesale prices of petroleum fuels that are very similar with the exception of whether or not the producers of these fuels incurred an RFS obligation (for example, diesel fuel and jet fuel prices from the U.S. gulf coast). Unlike other studies that examined indirect indicators that are susceptible to many factors outside of the RFS program such as blender margins or crude oil crack spreads, this methodology allows the authors to directly assess the impact of RIN prices on fuels that are very similar both physically and chemically.⁶⁹ The authors of these papers concluded that the RIN cost was generally included in the sales prices of obligated fuels. Knittel et al further found that the RIN pass through, or the ability of the merchant refiners to recover the cost of RINs was complete (not statistically different than 100%) and occurred quickly (within 2 business days).⁷⁰

Multiple commenters critiqued methods used by Knittel et al in these papers.⁷¹ These critiques generally focused on 3 issues: the removal of Brent crude based spreads from the assessment, the addition of a NYH CBOB – Rotterdam EBOB spread, and the pooling approach used by the authors. The removal of the Brent crude based spreads improves rather than diminishes the assessment presented by Knittel et al. We believe the impact of the RIN price on the wholesale price of refined products is most clearly seen by comparing pairs of refined products rather than comparing crude prices to refined product prices, as many compounding factors can and do influence the price relationship between crude oil and refined products. Further, while there may be concerns related to the appropriateness of the decisions by the authors to include an additional refined product price spread and pool the results of the various comparisons, EPA does not believe these decisions had a significant impact on the conclusions of the paper. Even if the EPA excludes consideration of the additional refined product pair and assesses the five original

⁶⁷ For example, see comments submitted by Marcia Pica Karp, Chevron, EPA-HQ-OAR-2016-0544-0209; David Masuret, Cumberland Farms, EPA-HQ-OAR-2016-0544-0160; C.R. Knittel et al. EPA-HQ-OAR-2016-0544-0280.

⁶⁸ Knittel, Christopher R., Meiselman, Ben S., and Stock, James H. *The Pass-Through of RIN Prices to Wholesale and Retail Fuels under the Renewable Fuel Standard*, November 2016.; Knittel, Christopher R., Meiselman, Ben S., and Stock, James H. *The Pass-Through of RIN Prices to Wholesale and Retail Fuels under the Renewable Fuel Standard: Analysis of Post-March 2015 Data*. November 23, 2016.; Argus Consulting Services. *Do Obligated Parties Include RIN costs in Product Prices?* February 2017.

⁶⁹ Argus Consulting Services also examined the average price ratio between RBOB and ULSD to crude prior to 2013 and between 2013 and 2016 which, while not conclusive on its own, similarly indicated that refiners were reflecting RIN costs in the prices of RBOB and ULSD. Argus also noted that both Argus and Platts include RVO cost considerations in their pricing methodology.

⁷⁰ Ibid.

⁷¹ Charles River Associates. *Review of Updated Pass-Through Analysis of Knittel, Meiselman and Stock*. February 2017.

refined product spreads individually rather than together as suggested by commenters critiquing the Knittel et al paper, this paper provides compelling evidence that the RIN price is reflected in the wholesale price of refined products subject to an RFS obligation, and that the RIN cost is therefore generally recovered by obligated parties, including merchant refiners.

In their petition, Valero, while generally acknowledging their efforts to recover RIN costs through higher prices for their petroleum blendstocks,⁷² nevertheless claims that the RFS program leaves them at a disadvantage relative to integrated refiners. They argue that while both merchant and integrated refiners receive higher prices for their petroleum blendstocks as a result of the RFS obligations, merchant refiners must use this additional income to purchase RINs for compliance while integrated refiners acquire the RINs they need for compliance “for free” by blending renewable fuels.⁷³ This argument is illogical as it simply ignores the cost that integrated refiners pay to acquire RINs.

Unlike merchant refiners, integrated refiners generally acquire most of their RINs by purchasing renewable fuel with attached RINs. After blending the renewable fuel with petroleum blendstocks to produce finished transportation fuel, integrated refiners separate the RINs and keep them to demonstrate compliance, or in some cases sell excess RINs to other obligated parties.

While the integrated refiners generally do not purchase separated RINs with an easily-identified price, it is not the case that they acquire these RINs for free.⁷⁴ They no more receive the RIN for free than one receives an engine for free when purchasing a car. In examining wholesale prices for gasoline blendstocks, ethanol, and blended E10, EPA found that the listed prices for blended E10 were consistently lower than the price that would be expected based on the selling prices of the component fuels.⁷⁵ In other words if we were to ignore the RIN revenue, parties that produce E10 by blending gasoline blendstocks with ethanol would be losing money on every gallon of E10 they produce. A gallon of E10 is generally produced by blending 0.9 gallons of gasoline blendstock (usually CBOB or RBOB) with 0.1 gallons of ethanol. The listed price for E10, however, was lower than the price of 0.9 gallons of gasoline blendstock plus 0.1 gallons of ethanol.⁷⁶ Thus, integrated refiners are selling blended E10 for a lower price than they could receive for the component fuels (petroleum blendstock and ethanol) to acquire the RINs that can be separated and retained if they sell blended E10. Integrated refiners therefore experience the cost of acquiring RINs when they sell blended fuels for a lower price than the blend components, while merchant refiners experience RIN costs when they purchase separated RINs. In each case there is a cost to the refiners to acquire RINs, and in each case they recover this cost through higher petroleum blendstock prices. In a presentation to the EPA, Murphy USA discussed this

⁷² For example, see Valero Petition for Rulemaking, June 13, 2016. Page 18. In more recent communications with EPA Valero has questioned the ability for merchant refiners to recover the full cost of the RIN through the price of their petroleum blendstocks under current market conditions.

⁷³ For example, see Valero Petition for Rulemaking, June 13, 2016. Page 16.

⁷⁴ Parties that acquire RINs through blending have affirmed that they do not receive RINs for free. For example, see testimony from Chris Vergona of Musket Corporation on the proposed 2018 RFS annual rule.

⁷⁵ "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effect," Dallas Burkholder, Office of Transportation and Air Quality, US EPA. May 14, 2015.

⁷⁶ Ibid

market reality, stating that the RIN prices supported a negative “spot-to-rack margin.”⁷⁷ They are purchasing petroleum blendstocks from refiners for a higher price than they can recover for this product when sold at the rack as blended E10 but maintaining profitability through RIN sales. This observed market practice supports the findings by the EPA and other parties that despite the higher prices of petroleum blendstocks resulting from higher RIN prices, the costs of transportation fuel to consumers have not increased as Valero has claimed.⁷⁸

While the EPA continues to believe that refiners, including merchant refiners, are generally able to recover the cost of RINs through the prices they receive for the petroleum blendstocks they sell, we also acknowledge that there are many diverse factors that impact each individual refiner’s profitability and their ability to recover their full cost of production (including crude oil costs, labor costs, capital costs, regulatory and compliance costs, etc.). These factors include, but are not limited to, the refinery’s location, their access to various types of crude oil, the local demand and competition for refined products. In recent years, a number of factors have led to an oversupply of refined gasoline and diesel in the United States. In such a market we would expect significant pressure on refining margins as the supply of refined products outpaces demand and refiners compete with one another to find markets for their products (potentially including exports) and maintain market share. These market conditions are expected to result in reduced profit margins for refiners, and in some cases refiners may struggle to remain profitable.⁷⁹ In evaluating whether or not to change the point of obligation, however, it is important to consider whether these challenges are caused by the current point of obligation in the RFS program (rather than more broad market conditions), and whether changing the point of obligation would be expected to address these challenges. Based on the information discussed above, we do not believe the challenges faced by some refiners in the current market are the result of their designation as obligated parties in the RFS program.

The EPA also examined claims made by the petitioners that unobligated blenders were reporting windfall profits by selling RINs. The petitioners primarily supported these claims by referencing the financial statements of companies that acquire RINs by blending renewable fuels and who sell these RINs to obligated parties, but are not obligated parties themselves.⁸⁰ EPA does not believe that the information presented by the petitioners substantiates their claims that unobligated blenders are generating windfall profits from RIN sales. First, we note that the fact that companies report income for RIN sales does not indicate that these companies are receiving a windfall from the RFS program. This is equivalent to claiming a company’s reported sales are

⁷⁷ See Presentation from Murphy USA to EPA, August 16, 2016.

⁷⁸ "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effect," Dallas Burkholder, Office of Transportation and Air Quality, US EPA. May 14, 2015 and Knittel, Christopher R., Ben S. Meiselman, and James H. Stock. The Passthrough of RIN Prices to Wholesale and Retail Fuels Under the Renewable Fuel Standard. Working Paper 21343. NBER Working Paper Series. Available online <<http://www.nber.org/papers/w21343.pdf>>. While these papers demonstrate that the cost of transportation fuel to consumers does not increase due to higher RIN prices, EPA acknowledges that higher renewable fuel obligations can lead to higher transportation fuel prices for consumers if renewable fuels cost more than the petroleum based fuels they displace.

⁷⁹ See *2017 US Refining Forecast: Lean Times Ahead*, Opportune LLP, December 7, 2016. Available online: <https://www.lexology.com/library/detail.aspx?g=b7ae9acf-fc7d-466c-92a8-43b9fc005722>. In recent years, US refinery profitability has benefited from exporting excess refined products given their favorable economics situations compared to many foreign refiners.

⁸⁰ The parties most commonly cited by the petitioners are Murphy USA and Casey’s General Stores.

equivalent to their profits, while ignoring their expenses to acquire the good sold. While it is true that for companies such as Murphy USA who sell a significant number of RINs their “revenues are impacted by [their] ability to generate revenues from activities such as blending bulk fuel with ethanol and bio-diesel to capture and subsequently sell Renewable Identification Numbers,”⁸¹ this does not mean that these companies receive a windfall profit from RIN sales. Such an assessment ignores costs that the company realized in order to acquire these RINs, such as lower fuel margins than would have been realized if the party did not blend renewable fuels and any investments in infrastructure that the company has made to enable them to blend renewable fuels and distribute these fuel blends. Statements from Murphy USA cited in the AFPM petition to support AFPM’s claim that non-obligated blenders are realizing windfall profits from RIN sales in fact support EPA’s views of the market. In a recent earnings call, the President of Murphy USA stated “if you add the combination of the gross margin from product supply and wholesale and the RINs and divide over the total retail gallons sold, you actually see a fairly consistent incremental \$0.025 per gallon over the past two years.”⁸² In other words, overall fuel supply margins (including RIN sales) have been relatively consistent despite the significant increase in RIN prices. This supports the EPA’s view that RIN costs and revenues must be viewed in combination with other product supply and wholesaling margins. The EPA received many comments from blenders indicating that the RIN value is used to offset the cost of blending, and that the value of the RIN is used to pass savings onto consumers.⁸³ Additionally, many blenders indicated that they purchase fuel above the rack only some of the time, and instead chose to purchase blended fuel below the rack at times, based on factors such as geography, store density, suppliers, relationships with terminals and infrastructure.⁸⁴

The EPA recognizes that there are many factors that affect the profitability of participants in the fuels market, and disagrees that the available information supports a conclusion that RIN revenues are leading to windfall profits. In 2014 and 2015 Murphy USA reported RIN sale revenues of \$93 million and \$118 million respectively. If this income represented windfall profits, we would expect that the net income of Murphy USA would be approximately \$100 million per year higher than it was prior to the significant increase in RIN prices in 2013. In fact, while Murphy USA’s profits in 2014 and 2015 of \$244 million and \$176 million⁸⁵ were significantly higher than in 2012 (\$84 million), they were significantly less than net profits in 2011 (\$324 million).⁸⁶ While we acknowledge that there are many factors that impact the profitability of a company such as Murphy USA in any given year, we nevertheless believe that the data before the Agency does not support the claims by some parties, whether explicit or implicit, that RIN sales represent windfall profits to companies that blend renewable fuels.

⁸¹ Murphy USA, Inc., U.S. SEC Form 10-K for the financial year ended December 31, 2015.

⁸² Transcript of Murphy USA First Quarter Earnings Call, Andrew Clyde, President, Murphy USA, Thompson Reuters (Feb. 4, 2016). Citation from AFPM’s petition for rulemaking, August 4, 2016. (page 15) .

⁸³ See, e.g., Comments submitted by Cumberland Farms, EPA-HQ-OAR-2016-0054-0160.; SEI Fuel and 7-Eleven, EPA-HQ-OAR-2016-0054-0133.;

⁸⁴ See, e.g., Comments submitted by SEI Fuel and 7-Eleven, EPA-HQ-OAR-2016-0054-0133. Fuel purchased below the rack would not have an RFS obligation even if EPA changed to point of obligation to the “position holders” as the petitioners have requested.

⁸⁵ Murphy USA net profit numbers for 2014 and 2015 from Murphy USA, Inc., U.S. SEC Form 10-K for the financial year ended December 31, 2015.

⁸⁶ Murphy USA net profit numbers for 2011 and 2012 from Murphy USA, Inc., U.S. SEC Form 10-K for the financial year ended December 31, 2013.

Further, statements from Casey's General Stores and Murphy USA contradict the notion that RIN sales represent windfall profits for unobligated blenders. Murphy USA reported that in the third quarter of 2014 income received from RIN sales offset negative product supply and wholesale margins.⁸⁷ This statement is in line with statements from Murphy USA cited above and EPA's view of the market explained in the preceding paragraph, that companies that blend renewable fuels with petroleum blendstocks to produce finished transportation fuel must purchase petroleum blendstocks at a higher price that reflects the cost of the RIN, and sell blended transportation fuel at a lower price that reflects their ability to separate and sell the RINs associated with the renewable fuel, to offer finished fuel at a competitive price. In effect, these parties sell the finished transportation fuel at a loss (or a much smaller margin than would be sustainable in a market without RIN obligations) in order to obtain RINs. In their annual report filed in June 2015, Casey's General Stores directly stated that their general pricing practice is to price to their competition,⁸⁸ a practice the EPA has repeatedly stated we expect is the general practice in competitive markets. We believe this competitive pricing behavior is incompatible with the windfall profits suggested by the petitioners.

Many commenters addressed the issue of the potential for unobligated blenders to earn windfall profits from RIN sales and the competitive advantages these RIN sales could provide relative to small retailers that do not blend renewable fuels. Many commenters, including several large retailers and unobligated blenders, agreed with the EPA's assessment of the market and affirmed that unobligated blenders are not realizing windfall profits from RIN sales.⁸⁹ One commenter provided data from their local market including the prices of ethanol, gasoline blendstocks, RINs, and other costs associated with supplying blended transportation fuel demonstrating that the value of the RIN was indeed reflected in the wholesale price of E10 and was not withheld by the fuel blender.⁹⁰ This commenter presented further information demonstrating that despite their status as a largely unobligated blender, the RIN prices had no impact on their retail fuel margins from August 2008 through August 2016.⁹¹

Other commenters, however, questioned this finding, with several submitting papers or public statements made by representatives of unobligated blenders supporting their views.⁹² Two primary references often cited by commenters, which are generally representative of comments received on this issue, are a report on the estimation of the margins of large retailers by Ramon

⁸⁷ *Murphy USA Inc. Reports Third Quarter 2014 Results*. Yahoo! Finance, November 5, 2014. Available online <<http://finance.yahoo.com/news/murphy-usa-inc-reports-third-220006760.html>>.

⁸⁸ Casey's General Stores, Inc., Annual Report (Form 10-K) (June 26, 2015).

⁸⁹ For example, see comments from Casey's General Stores, Inc, EPA-HQ-OAR-2016-0544-0268, NATSO EPA-HQ-OAR-2016-0544-0282, SEI Fuels and 7-Eleven, EPA-HQ-OAR-2016-0544-0133, Murphy USA, EPA-HQ-OAR-2016-0544-0372, QuikTrip, EPA-HQ-OAR-2016-0544-0198, and KwikTrip, EPA-HQ-OAR-2016-0544-0105.

⁹⁰ See comments from Cumberland Farms, EPA-HQ-OAR-2016-0544-0160. As part of their comment Cumberland Farms also submitted a screen shot of the software they use to calculate and account for E10 fuel costs. The value of the RIN is directly taken into account in their pricing calculations.

⁹¹ *Ibid*.

⁹² For example, see comments from Valero, EPA-HQ-OAR-2016-0544-0274, Small Retailer Coalition, EPA-HQ-OAR-2016-0544-0344, Buffalo Services, Inc., EPA-HQ-OAR-2016-0544-0184, Friendly Mart Food Stores, EPA-HQ-OAR-2016-0544-0387.

Benavides and a paper authored by Dr. Weinstein on the consequences of RIN trading for small retailers.⁹³ The paper by Mr. Benavides attempts to estimate retail margins for two large retailers (Pilot/Flying J and Loves) compared to reported national averages. After finding higher than average retail margins, Mr. Benavides attributes these higher margins to the ability to retain the value of the RIN when blending renewable fuels. This paper, however, contains several methodological flaws. As noted in comments by the National Association of Truck Stop Owners (NATSO)⁹⁴ the paper considers only data from a single day rather than an extended time period, used broad market data rather than data specific to the companies it assesses, does not consider costs to transport renewable fuels to retail outlets, simply assumes that retailers retain 100% of the value of the RIN and any tax credits associated with the renewable fuel, and does not account for the actual prices paid by their customers (which often include significant discounts from posted prices). The paper also incorrectly assumes a uniform, nationwide price for renewable fuels. Finally, even if the higher margins suggested by this paper are accurate (which appears highly unlikely), the paper makes no attempt to attribute this higher margin to the value of the RINs versus other factors that may contribute to higher margins of the companies assessed relative to the national average such as these parties' ability to buy fuel in bulk, high fuel sales volumes, etc.

The EPA also reviewed the paper prepared by Dr. Weinstein for the Small Retailer Coalition on the unintended consequences of the RFS program for small fuel retailers.⁹⁵ In concluding that the current point of obligation could disadvantage small retailers (relative to large retailers with the ability to blend renewable fuels and separate RINs) Dr. Weinstein relied on two primary sources; the paper by Mr. Benavides discussed above and statements by several large companies that own retail fuel stations and blend renewable fuels. Generally, Dr. Weinstein highlights income associated with RIN sales and statements that access to RINs and RIN revenue advantages these companies relative to their competitors as the basis for his conclusions. However, these statements do not justify Dr. Weinstein's conclusions. First, as discussed above, income from RIN sales is not equivalent to profits from the separation of the RINs, nor is it evidence that these parties can retain all or a significant portion of the value of the RINs. Indeed, as highlighted in the statement by Murphy in their Form 10-Q filed on November 3, 2016 (quoted in Dr. Weinstein's paper) Murphy accepts negative product supply and wholesale margins in order to get access to RINs. The RINs are not "free" to these large retailers, and do not represent windfall profits. Additionally, statements that these companies are advantaged relative to their competitors with respect to their ability to realize additional margin from RINs and RIN sales do not suggest windfall profits as a result of the current point of obligation in the RFS program. There are many reasons these companies could be advantaged relative to their competitors with respect to their ability to realize profits from RINs and RIN sales such as advantageous long term contracts for renewable fuels, access to renewable fuels with higher value RINs (such as advanced or cellulosic biofuels, as alluded to by Couche-Tard's CFO Claude Tessier), better retail markets for higher level blends of renewable fuels, and the ability to hold RINs in an effort

⁹³ Benavides, Ramon M. *Renewable Fuel Incentives: Estimation of Large Retailers' Margins* and Weinstein, Dr. Bernard L. *Renewable Identification Numbers (RINs) Trading Under the Renewable Fuels Program: Continued Unintended Consequences for Small Fuel Retailers Updated Report*. February 2017.

⁹⁴ See comments from NATSO, EPA-HQ-OAR-2016-0544-0282.

⁹⁵ Weinstein, Dr. Bernard L. *Renewable Identification Numbers (RINs) Trading Under the Renewable Fuels Program: Continued Unintended Consequences for Small Fuel Retailers Updated Report*. February 2017.

to sell when the prices are most favorable.⁹⁶ None of these factors are the result of the point of obligation in the RFS program, nor would any of them change if EPA were to change the point of obligation as the petitioners suggest.⁹⁷

After reviewing the comments submitted on our proposed denial of the petitions to change the point of obligation in the RFS program, the EPA reaffirms the position stated in our proposed denial. We do not believe the available data indicates that large retailers or unobligated blenders are realizing windfall profits as the result of their access to RINs. On the other hand, a contrary finding is well supported by the data presented here and the supporting comments submitted by many with direct knowledge and experience on this issue. While we recognize that many small retailers may be facing significant economic hardship, we do not believe this hardship is primarily or even materially caused by the current point of obligation in the RFS program, but rather by a number of broader market factors (see Section II.D for a further discussion of this issue).

D. The Current Regulations Do Not Appear to Negatively Impact Small Retailers

The EPA received comments from the Small Retailers Coalition, an organization created in 2016 representing over 200 owners of gas stations and convenience stores, as well as comments from a number of parties that own and operate retail fuel stations.⁹⁸ EPA also received comments from the National Black Caucus of State Legislators echoing many of the concerns raised by the Small Retailers Coalition, contending that independent gasoline retail stations are harmed by the current point of obligation.⁹⁹ These comments suggested that the current point of obligation is harming small retailers by allowing their competitors to obtain and sell RINs which allow their competitors to more competitively price their fuels. They contend that their competitors are gaining a \$.10-\$.15 per gallon advantage over small and medium suppliers. Commenters further suggest that this pricing advantage is available to their competitors as a result of their ability to realize windfall profits from RIN sales and that the disparity will likely result in the closure of a large number of the stores owned by single-store owners and medium sized gas stations and convenience stores. According to some commenters, such closures could lead to lower levels of competition among parties that sell gasoline and diesel at the retail level, ultimately leading to higher fuel prices for consumers. Some commenters suggested that because large retailers are realizing such significant profits from RIN sales they have no incentive to invest in infrastructure to expand the availability and use of renewable fuels, and in some cases

⁹⁶ See comments from the Small Retailers Coalition, EPA-HQ-OAR-2016-0544-0344.

⁹⁷ These advantages are related to the company's ability to acquire renewable fuels at lower prices than their competitors or their ability to sell renewable fuel blends at higher prices than their competitors. To the degree these advantages exist, they are highly unlikely to be impacted by a change in the point of obligation.

⁹⁸ For example, see comments from the Small Retailer Coalition, EPA-HQ-OAR-2016-0544-0344; Short Stop, EPA-HQ-OAR-2016-0544-0174; L & L Stores, EPA-HQ-OAR-2016-0544-0426. EPA also received a series of comments from the Petroleum Marketers Association of America (PMAA). Initial comments from PMAA indicated support for maintaining the current point of obligation, however in subsequent correspondence PMAA stated it was taking a neutral position on where the point of obligation should be placed due to growing concerns for unfair competition in the retail market. EPA believes these concerns are adequately addressed in this section.

⁹⁹ Comment from National Black Caucus of State Legislators, EPA-HQ-OAR-2016-0544-0166.

large retailers may actively work to restrict the expansion of this infrastructure, since commenters claim expanded infrastructure would reduce RIN prices. In comments, the Small Retailers Coalition suggested EPA should consider the impacts on small retailers of the current point of obligation in EPA's response to the petitions to change the point of obligation.¹⁰⁰ EPA has done as the Coalition has suggested, and EPA's analysis is provided in this document.

While the EPA recognizes the very real economic challenges faced by single-store owners and medium sized gas stations and convenience stores, we do not believe these challenges are primarily, or even materially, the result of the current point of obligation in the RFS program or the RFS program more generally. As discussed in further detail in Section II.C above, EPA does not believe that the comments submitted on our proposed denial adequately support the claims that large retailers and unobligated blenders are able to realize windfall profits from RIN sales. After carefully reviewing the comments and the available market data the EPA reaffirms that while unobligated parties that acquire RINs by blending renewable fuels (such as large retailers) can and generally do receive significant revenue through the sale of RINs, there is a cost to acquiring these RINs that is approximately equal to the revenue received through their sale. We also note that it is implausible that such a significant price advantage (\$0.10 to \$0.15 cents per gallon according to the Small Retailers Coalition, which is approximately 3 times higher than the average profit per gallon)¹⁰¹ could be sustained in the highly competitive retail fuel market. To the degree that larger competitors are able to access lower cost fuels, there is no basis for concluding that these advantages are attributable to the RFS program. Rather, we believe that the significant challenges faced by many small retailers are rather the result of challenges in the retail fuels market such as a declining demand for refined transportation fuels (particularly gasoline), increased competition from large retailers and high-volume retail outlets, a lack of flexibility in fuel purchasing options relative to larger (often unbranded) retailers, and many others, many of which were mentioned by the small retailers in their own comments. After reviewing the information submitted by the petitioners and commenters, along with other market data, EPA has concluded that large retailers do not have the incentive or ability to effectively inhibit the greater use of renewable fuels in the United States (See Sections III.B – III.E below for a further discussion of these issues. While we understand that small retailers face significant economic challenges, these challenges are unrelated to the RFS program, and would not be fundamentally altered by changing the point of obligation in the RFS program.¹⁰²

¹⁰⁰ Comments from Small Retailers Coalition, EPA-HQ-OAR-0544-0185. The Small Retailers Coalition has also recently filed a complaint alleging that EPA has failed to do this analysis. See *Small Retailers Coalition v. US EPA and Scott Pruitt*, W.D. Tex., Case 7:17-cv-00121, Complaint filed 8/28/17.

¹⁰¹ According to NACS, the average retail fuel margin is about 3 to 5 cents per gallon (*NACS. 2015 Retail Fuels Report*).

¹⁰² In addition to believing that the RFS program is not harming small retailers generally, the EPA has also been presented with claims that the RFS program can benefit small retailers. The EPA received comments from the Petroleum Marketers and Convenience Stores of Iowa indicating that small retailers are benefiting from the RIN value through RIN trading via third party aggregators. Comments from Petroleum Marketers and Convenience Stores of Iowa, EPA-HQ-OAR-2016-0544-0199.

E. The EPA Has Not Seen Evidence That High RIN Prices Have or Will Force Refiners to Decrease Production or Increase Exports

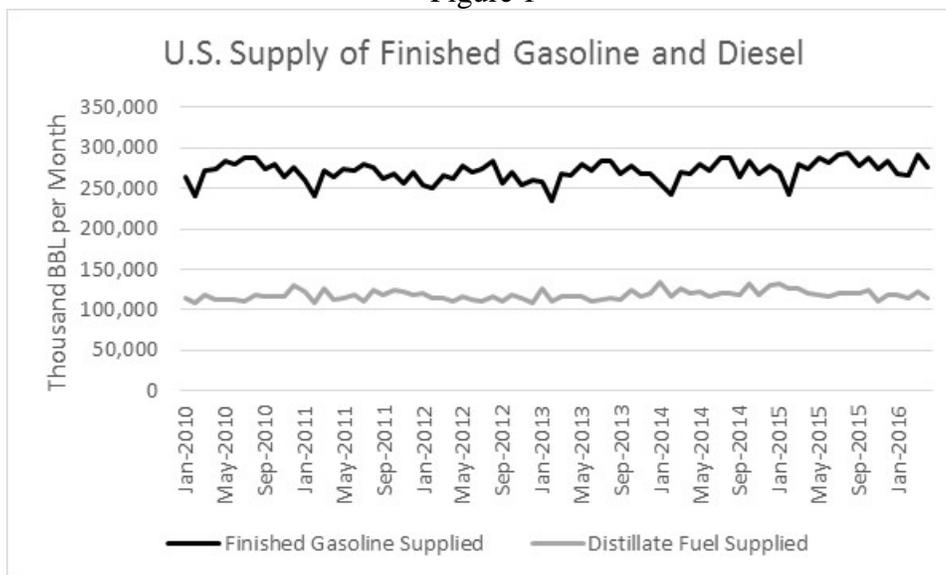
In their petition, Valero suggested that if the EPA does not change the point of obligation of the RFS program it could lead to obligated parties, particularly merchant refiners, decreasing their production of obligated fuels or increasing their exports of refined products in an effort to minimize the RFS obligations.¹⁰³ As discussed above, both merchant refiners and integrated refiners experience RIN acquisition costs, and both recover these costs through the price of the petroleum products they sell. The RFS program therefore does not impact merchant refiners in a way that would make them more or less likely than integrated refiners to decrease production of gasoline and diesel or increase exports of these fuels. Rather, decisions to decrease production or increase exports are driven by broader market factors, which effect both merchant and integrated refiners.

We also note that the idea that the RFS program could result in a reduced supply of gasoline and diesel to the United States through lower production volumes or increased exports is not new, as obligated parties have been suggesting that this could be a potential outcome of increasing RFS standards since the beginning of the program. Despite these warnings, and even with increasing vehicle fuel efficiency in the United States in previous years, the significant increase in both the RFS standards and RIN prices have not resulted in obligated parties taking these actions, as seen in the following graph.¹⁰⁴ Were high RIN prices to have this effect, one would expect to have seen a drop in fuel supply beginning in 2013, when RIN prices spiked.

¹⁰³ One commenter (NERA) claimed that since RIN costs are reflected in the wholesale price of gasoline blendstocks high RIN prices would encourage gasoline exports, as exported gasoline could receive the value of the RIN without incurring the RIN obligation. This commenter ignored the fact that the market price for exported gasoline is discounted relative to gasoline sold for the domestic market, and that this discount reflects the cost of the RIN obligation (for further discussion of this issue, see Section II.C above).

¹⁰⁴ The EPA also performed a separate analysis of refinery closures, derating, and expansions from 2013-2017. See Section III.G for a further discussion of the impact of the RFS program on refining capacity.

Figure 1



Data from EIA. Available at http://www.eia.gov/dnav/pet/pet_cons_psup_dc_nus_mbbld_m.htm

The lack of any impact on finished gasoline and diesel supply to the United States is not surprising, since as was discussed in Section III.B.2 above, data reviewed by the EPA show that obligated parties are generally receiving higher prices for fuels they produce that are subject to an RFS obligation (gasoline and diesel fuel sold for use in the United States), which offsets the cost of compliance with the RFS program. By contrast, if they export the gasoline and diesel fuel, they would not have costs associated with acquiring RINs but would also not receive the higher value for their petroleum products associated with RFS compliance costs. An obligated party's ability to recover RIN costs through the price of obligated blendstocks in some ways is similar to their ability to recover fuel taxes. Though state fuel tax rates vary from state to state these differences in fuel tax rates do not cause fuel shortages in states with higher tax rates, as parties that sell fuel are able to recover the cost of the taxes in the prices of the products they sell. Companies make decisions about which market segments to participate in for a variety of reasons, but we believe the demand for transportation fuel in the United States is strong enough that refineries and importers will continue to meet demand on a competitive basis, even if participating in the market incurs RFS obligations.

Several commenters pointed to increased exports of refined products (gasoline and diesel fuel) in recent years as evidence that the RFS program, and high RIN prices in particular, were incentivizing increasing exports. We acknowledge that exports of gasoline and diesel have been higher in recent years relative to 2010.¹⁰⁵ We do not, however, believe that these increasing exports are driven by the RFS program. Notably, total production of finished gasoline and

¹⁰⁵ See EIA data on Weekly U.S. Exports of Total Distillate (<https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WDIEXUS2&f=W>) and Weekly U.S. Exports of Finished Motor Gasoline (https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=W_EPM0F_EEX_NUS-Z00_MBBLD&f=W).

distillate in the United States has increased significantly since 2010¹⁰⁶ due to a number of factors including access to low cost crude oil and natural gas and high refinery utilization rates. During this same time period, demand for refined products in the United States has been fairly constant.¹⁰⁷ Refiners seeking export markets for their products at a time when supply increases have outpaced domestic demand for their products is a natural response, and is unrelated to the RFS program.

F. A Relatively Small Number of Obligated Parties is Generally Advantageous

In the 2007 RFS1 rule, the EPA indicated that it considered it preferable to place the point of obligation on a smaller number of refiners and importers rather than on a larger number of downstream blenders. This is primarily because placing the obligation on a smaller number of parties with significant assets generally results in a more efficient, and therefore more effective program. In the proposed RFS2 rule, we noted that blenders would likely be regulated as RIN holders under the expanded program, and questioned whether also making them obligated parties would significantly increase their regulatory burden. After considering comments, we chose in the final RFS2 rule to maintain the RFS1 approach, noting, among other reasons, that changing the point of obligation to include blenders could lead to disruption of the program in the transition of RFS1 to RFS2. After promulgating the final RFS2 rule we gained additional experience implementing the program that further supports our decision to maintain the current approach. Under the current system, it is renewable fuel producers who generate RINs, for gallons of biofuel produced, and it is the refiners and importers of gasoline and diesel fuel who must retire the RINs to demonstrate compliance. While the EPA is engaged in compliance and enforcement activities to address instances of invalid RINs in the marketplace, the sheer volume of RINs and RIN transactions makes it critical to also leverage the participation of obligated parties in policing the RIN market. In addition, refiners and importers are subject to significant requirements related to environmental, safety, and health concerns, and the expertise they have developed in maintaining compliance contributes to the success of the RFS program.

Refiners and importers generally have greater resources that enable them to provide oversight of the RIN generators to help ensure that the RINs being traded in the marketplace are valid. They have invested significantly since the finalization of the RFS regulations to develop compliance processes and expertise in these markets. Changing the point of obligation would potentially disrupt the systems developed by these parties, strand their investments, and would require that newly obligated parties make the necessary investments to enable compliance with their new RFS obligations. This could take a significant amount of time and represent a significant

¹⁰⁶ See EIA data on U.S. Refinery and Blender Net Production of Distillate Fuel Oil (<https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MDIRPUS1&f=M>) and U.S. Refinery and Blender Net Production of Finished Motor Gasoline (<https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MGFRPUS1&f=M>).

¹⁰⁷ See EIA data on Weekly U.S. Product Supplied of Distillate Fuel Oil (<https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WDIUPUS2&f=W>) and Weekly U.S. Product Supplied of Finished Motor Gasoline (<https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WGFUPUS2&f=W>).

financial burden to the new obligated parties, especially as we expect that many would be smaller companies with fewer resources than the existing obligated parties.

In contrast to the currently regulated refiners and importers, many “position holders” and blenders sell relatively small volumes of gasoline and diesel, and are likely relatively small entities without the personnel or expertise available to fill the role currently played by obligated parties in policing the validity of the RINs in the market. This concern was affirmed by our analysis of a data set recently provided to us by the Internal Revenue Service (IRS) (for a fuller discussion of the data the EPA received from IRS, and the EPA’s assessment of this data, see Sections IV.A and IV.B). The IRS data set included the volume of gasoline and diesel sold by all “positions holders” aggregated into groups of five and arranged from highest to lowest volume.¹⁰⁸ When the EPA overlaid this data set with our volume data for obligated parties (grouped in the same manner as the IRS), we found there were about 300 more parties in the IRS data set. Moreover, as discussed below, when we compared the total volume associated with “position holders” we found that more than half of the “position holders” (those with the smallest volumes) were responsible for less than 1% of the aggregate volume. Our conclusion from this comparison is that there is a significant number of small volume parties that are current “position holders” (subject to the IRS fuel tax laws) that would become new obligated parties, would likely not be familiar with how to comply with the RFS requirements and may not have the resources to do so. While it is possible that they would develop this expertise over time, the relatively small size of many of these entities may mean that the important market-policing function currently performed by obligated parties could be largely compromised by changing the point of obligation. This result is more likely considering that the current obligated parties tend to have larger assets that could be put at risk from non-compliance, and therefore take compliance with the RFS very seriously. Placing the RFS compliance obligations on refiners and importers also reduces the overall cost associated with the RFS program, as these parties benefit from economies of scale and can better spread the costs associated with RIN acquisition and oversight over greater quantities of RINs.

In addition to these benefits to the program, a smaller number of obligated parties significantly decreases EPA’s resource requirements associated with the administration of the RFS program. It reduces the number of annual compliance reports that must be reviewed by the EPA each year, and reduces the complexity associated with determining the volumes of gasoline and diesel for which each obligated party has a compliance obligation. This allows for more effective implementation and enforcement of the RFS program. In addition, we believe it is preferable to

¹⁰⁸ For example, IRS provided EPA with the total volume of gasoline and diesel sold by the 5 parties that sold the most gasoline and diesel, the total volume sold by parties that sold the 6th – 10th highest volumes of gasoline and diesel, etc. This IRS data was provided to the EPA on May 22, 2017. See *IRS Aggregated Volume Data*. This data is treated as CBI.

place the RFS obligation on larger companies with greater resources who are better positioned to comply with the RFS standards.¹⁰⁹

Several commenters contested the EPA's statements that changing the point of obligation to the "position holders" would increase the number of obligated parties.¹¹⁰ These commenters further argued that parties with enough capital and expertise to purchase fuel in bulk above the rack would be able to comply with RFS obligations. However, based on information from the IRS (discussed briefly above and further in Section IV.A and IV.B), we determined that if the point of obligation in the RFS program were placed on the "position holders," the number of obligated parties would increase significantly, and that many of these parties sell relatively small volumes of gasoline and diesel.

We note that if we had compelling evidence in front of us that placing the RFS obligation on a larger number of renewable fuel blenders or "position holders" would significantly increase the production, distribution, and use of renewable fuels, then a potentially higher number of obligated parties on its own would not likely be a reason to retain the current point of obligation. In light of the reasons discussed above, however, and because we do not think shifting the point of obligation would lead to higher renewable fuel production and use, and for other reasons discussed in this document, we believe that placing the obligation on the smaller number of refiners and importers is preferable.

G. The Current Program Structure Does Not Require Market Repositioning to Achieve Compliance

One of the petitions the EPA received requesting a change in the point of obligation in the RFS program took issue with language in previously published EPA documents suggesting that one potential avenue for obligated parties to acquire RINs is the purchase or construction of downstream blending assets.¹¹¹ The petitioner emphasized the challenges associated with the acquisition of such assets. They further claimed that this suggestion reflects a lack of understanding of the complexities of the fuel market, and implicitly suggests that investment in blending infrastructure is the only solution for merchant refiners to comply with the RFS.

The EPA strongly disagrees with the petitioner's assessments of the EPA's previous statements. In the document referenced by the petitioner, the EPA notes that the acquisition of downstream assets is merely one option open to obligated parties who seek an alternative to purchasing separated RINs necessary for compliance. The fact that ownership of positions at terminals and

¹⁰⁹ While the evidence before EPA demonstrates that the cost of RINs are generally recovered by the obligated parties, larger companies with greater resources are significantly more likely to have expertise related to complying with EPA regulations (including, but not limited to their RFS obligations), ensuring the validity of RINs, etc.

¹¹⁰ For example, see comments submitted by Valero, EPA-HQ-OAR-2016-0544-0274; AFPM, EPA-HQ-OAR-2016-0544-0360; Monroe Energy, EPA-HQ-OAR-2016-0544-0368

¹¹¹ See Valero Energy Corp. Petition for Rulemaking, June 13, 2016, 16-17. Valero referred to statements made by EPA in *A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects* (May 14, 2015), written by Dallas Burkholder.

access to pipeline capacity¹¹² has continually changed over time suggests that similar changes are possible in the future, if parties were motivated to pursue these options. Most importantly, however, the EPA disagrees with the statement that our suggestion that acquiring downstream assets as one possible option open to obligated parties implies that ownership of these assets, as well as ownership of hydrocarbon at the time when renewable fuel is blended (generally at the rack), is the only option for acquiring the RINs needed for compliance with the RFS obligations. The EPA created the RIN system in accordance with Congressional direction, both as a general compliance mechanism for the RFS program and to allow for the generation and use of credits.¹¹³ Purchasing separated RINs remains an option available for all parties to acquire the RINs that are needed by obligated parties. The active market for RINs, which includes a significant stock of carryover RINs, demonstrates that RINs are available to parties who wish to purchase them. For example, according to EPA data there were over 50 billion RIN trades for the 2014 compliance year (the most recent year for which data are available).¹¹⁴ We firmly believe that the RIN market is capably fulfilling this intended purpose of creating an avenue for obligated parties to comply with their RFS obligations by purchasing RINs, rather than requiring the acquisition of distribution and blending infrastructure and/or ownership of petroleum fuels at the rack. In this way, the RIN market enables compliance with RFS obligation without disrupting the fuels marketplace. Rather than a necessity, the acquisition of downstream infrastructure to enable direct access to RINs through the blending of renewable fuels at the rack remains one of several options. Parties may also purchase separated RINs in the RIN market, enter into contracts with other parties that blend renewable fuels to obtain RINs, and purchase renewable fuel with attached RINs, separate the RINs, and resell the renewable fuel without RINs in order to acquire the RINs needed to comply with the RFS standards.

H. The Current RIN Market Does Not Appear to be Subject to Significant Manipulation, and a Change in the Point of Obligation will not Reduce Fraud

Some commenters suggested the RIN market is not functioning due to manipulation and speculation within the market. Others noted that a lack of transparency in the RIN market allows for speculation, and that a revision of the definition of obligated party would increase transparency and reduce market abuse. It is not clear from comments how changing the definition of obligated party would increase transparency. Although the EPA has not seen evidence of manipulation in the RIN market, claims of market manipulation prompted the EPA to execute a memorandum of understanding (MOU) with the U.S. Commodity Futures Trading Commission (CFTC), which has the authority and expertise to investigate such claims. The EPA will continue to apprise the CFTC of allegations regarding potential market manipulation.¹¹⁵

¹¹² While the ownership of positions at terminals and pipeline capacity are not necessary to enable ownership of gasoline or diesel blendstocks at the rack, owning positions at terminals and pipeline capacity are ways for obligated parties to retain ownership of petroleum blendstock at the rack, where it can be blended with renewable fuels.

¹¹³ See CAA 211(o)(5).

¹¹⁴ See Annual RIN Sales/Holdings Summary on EPA public website: <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/annual-rin-salesholdings-summary>

¹¹⁵ Some commenters alleged speculation was negatively impacting the functioning of the RIN market. Speculation is a normal part of the market. Market participants that *speculate* on future supply or demand, and therefore prices, aren't doing anything wrong. In fact, this helps the market ensure that the future demand is met at the lowest overall

Some commenters suggested that third party speculators (parties that are not involved in the production or blending of renewable fuels and are not obligated parties) and RIN-long parties are withholding RINs to drive up prices. They allege that third parties and RIN-long parties¹¹⁶ are profiting from these actions at the expense of small and merchant refiners. These commenters have not provided sufficient evidence to support their claims that integrated refiners or unobligated blenders (who would likely be RIN long) are intentionally withholding RINs from the market in an effort to manipulate RIN prices. As discussed further in Section II.B above, we do not believe that current RIN prices reflect successful efforts by some parties to artificially inflate RIN prices, but rather that they are reflect the costs associated with producing additional volumes of renewable fuel (in the case of biodiesel) or the financial incentives needed to sell additional volumes of higher level blends of renewable fuel (in the case of ethanol).

The EPA received some other comments that changing the point of obligation to the “position holders” would reduce fraud in the RFS program. These parties generally claimed that “position holders” are better equipped to ensure the validity of RINs because they are closer to the actual point of blending. In response to these comments, EPA notes that the majority of the RIN fraud seen in the RFS program to date has been for RINs associated with biodiesel. The majority of biodiesel is blended with diesel downstream of the rack. Therefore, “position holders,” who by definition transfer ownership of the fuel at the rack, may be in no better position to monitor biodiesel blending than a refiner. Under the current Part 80 regulations, each obligated party incurs an RVO for both diesel and gasoline, even if they are only producing one of the two types of fuel. Likewise, if the point of obligation moved to “position holders,” even “position holders” that only blend ethanol into gasoline would still incur an RVO for diesel and would still be required to acquire RINs from biodiesel blending.

Several commenters pointed to comments from Doug Parker indicating that the chain of custody between producer, blender, and refiner has led to fraud within the RIN market. As an initial matter, historically, EPA has seen fraud within the RIN market at locations upstream of the point of compliance and the point of obligation. Generally, defendants in the majority of the RIN fraud cases brought to date generate RINs for fuel that is never produced, generate RINs for fuel that is not used for a qualifying purpose (transportation fuel, heating oil or jet fuel), or export renewable fuel without retiring the appropriate RINs. These cases have resulted in significant criminal convictions and a substantial number of associated civil enforcement cases. The EPA believes that our enforcement actions and increased due diligence by RIN purchasers have helped to deter these types of violations, and note that these fraud cases are unlikely to have been prevented by a different point of obligation due to the nature of the fraud.

price possible. Unlike market speculation, market *manipulation* involves a deliberate (and illegal) attempt to interfere with the free and fair operation of the market and create artificial, false or misleading appearances with respect to the price of, or market for, RINs.

¹¹⁶ RIN-long parties are those who obtain more RINs through blending than their obligation under the RFS program; i.e., they are “long” on RINs as compared to their obligation.

Some commenters, relying on Doug Parker’s analysis suggested that “shortening the RIN chain of custody between the point of compliance¹¹⁷ and the point of obligation” would inherently reduce the opportunity and incentive for fraud.¹¹⁸ These comments suggest that the current “chain of custody” places refiners and importers “multiple steps removed from the decision point on where renewable fuel is purchased in order to blend it,”¹¹⁹ and that blenders have direct engagement with renewable fuel producers and are better able to “assess the quality and integrity of their suppliers.”

These commenters suggested that a change to the point of obligation would place compliance through blending closer to the renewable fuel source and would improve verification. Despite commenters suggestions to the contrary, the chain of custody between renewable fuel producers and obligated parties could be just as long as it is currently, and would likely be as long in the case of biodiesel, where renewable fuel is blended beyond “position holders,” as discussed above. Because obligated “position holders” would still have four unique renewable fuel volume obligations, they would likely still have to sell and purchase RINs to meet their RVOs for types of renewable fuel which they are unable to blend. This is especially true for “position holders” that primarily sell a single fuel type, such as gasoline or diesel, and therefore have limited opportunities to blend ethanol or biodiesel respectively. Doug Parker’s initial comments may have been based on a theory where the “blender” would be obligated, and would be the person with access to the renewable fuel that would be blended. For ethanol blending, the blender and the “position holder” are likely the same person, however, for biodiesel, it is much less likely that the blender and the “position holder” are the same person. In his comments, he states that “changing the point of obligation to the location where actual decisions are made on blending conventional and renewable fuel would . . . significantly enhance compliance and reduce opportunities for fraud.”¹²⁰ However, changing the point of obligation to “position holders” would not always place the point of obligation where “actual decisions are made on blending;” for example, biodiesel blending decisions are often made below the rack. Thus, the disconnect between the point of obligation and the point of blending could still exist, and likely would for biodiesel. While changing the point of obligation to the position holder may shorten the chain of custody for RINs associated with ethanol, most of which is currently blended at the rack, we note that the vast majority of RIN fraud cases to date have been associated with biomass-based diesel (D4) RINs.

There continues to be a significant risk of invalid RINs in the market arising from the use of improper feedstocks, unapproved pathways or even improper attribution of pathways (e.g. overstating production of renewable fuel from cellulosic vs. non-cellulosic feedstocks). Smaller parties with less resources will have correspondingly less likelihood of detecting these problems. Doug Parker, in comments, also suggested that “soaring prices of RINs” act as an additional incentive for fraud. The EPA does not dispute that fraudulent activity often occurs for financial

¹¹⁷ Although the “point of compliance” is not defined in Parker’s comments, EPA believes that this would be the point where renewable fuel is blended with non-renewable fuel. As mentioned above, for ethanol blending, this often occurs at the rack, however blending of biodiesel occurs most often downstream from the rack.

¹¹⁸ See, e.g., Comments from Small Refiners’ Coalition, HQ-OAR-2015-0054-0406.

¹¹⁹ Parker, Doug. Update to: September 4, 2016 White Paper Addressing Fraud in the Renewable Fuels Market and Regulatory Approaches to Reducing this Risk in the Future. February 3, 2017.

¹²⁰

gain, but EPA disagrees that moving the point of obligation will reduce the price of RINs as discussed in this section and in Section III.

In arguing for a change in the point of obligation, Monroe Energy suggested that under the current definition of “obligated party,” blenders and non-obligated parties who sell RINs have no incentive to ensure that their RINs are valid, and that refiners and importers are the only parties at risk when purchasing potentially fraudulent RINs. The EPA notes that Monroe’s statement is inaccurate since parties who sell RINs must register under the RFS program, and can be held liable if the RINs they sell are deemed invalid or fraudulent. Therefore, they do indeed have an incentive to ensure that RINs they purchase and sell are valid. However, we also believe that larger entities, with more assets at risk and more resources to devote to compliance, are more likely to engage in in-depth due diligence investigations into RIN validity than smaller, less sophisticated parties. Therefore, a scheme that eliminated many larger refiners and importers from the obligation to acquire RINs, and shifted RIN responsibilities to smaller entities such as many “position holders” and blenders, would be more likely to result in an increase, rather than a decrease in instances of RIN fraud. BP and others who do not favor a change in the point of obligation suggested that smaller parties who could become obligated if the point of obligation were changed may not have the capability to conduct due diligence to ensure that the RINs they acquire are valid. Once the relaxation of RIN verification occasioned by such a change in the point of obligation were noticed, the change could encourage the generation of fraudulent RINs.

III. Changing the Point of Obligation in the RFS Program Is Not Expected to Result in the Increased Production, Distribution, and Use of Renewable Fuels

We have discussed in the previous section several significant concerns about the impact changing the point of obligation would have on the RFS program. Given these concerns, and our overall obligation to implement the RFS program in a way that most fully achieves Congress’s goal of increasing renewable fuel use, the point of obligation should only be changed if it would be expected to lead to net benefits. As we discuss in this section, we do not believe that the record before us indicates that this is the case.

In their petitions submitted to the EPA requesting a change to the point of obligation in the RFS program the petitioners claim that changing the point of obligation could result in greater production, distribution, and use of renewable fuels in the United States. The petitioners suggest that changing the point of obligation could therefore reduce or even eliminate the need for the EPA to exercise our waiver authorities. The petitioners generally offer only theoretical arguments to support these claims. In this section we describe our evaluation of petitioners’ claims that changing the point of obligation would increase the production, distribution, and use of renewable transportation fuels in the United States.

The use of the EPA’s waiver authorities to reduce the required volume obligations from the statutory levels in recent years is primarily the result of the delay in the commercialization of cellulosic biofuels and resulting shortfall in cellulosic biofuel production volumes relative to the statutory targets. In addition to the shortfall in cellulosic biofuel production, the EPA also noted challenges associated with increasing the supply of renewable fuel to consumers associated with

distribution and use of renewable fuels, particularly ethanol and biodiesel in its rule establishing the RFS standards for 2014-2016.

In their petitions, the parties requesting that the EPA change the point of obligation did not address how changing the point of obligation might impact the shortfall in cellulosic biofuel production,¹²¹ but instead narrowly focus on the impacts on the distribution and use of other renewable fuels, particularly ethanol and biodiesel that they believe would result from changing the point of obligation. The petitioners argue that changing the point of obligation could increase the supply of renewable fuel to consumers by increasing the blending infrastructure for renewable fuels, improving the retail pricing of fuel blends with higher renewable fuel content relative to those with lower renewable fuel content, and increasing the availability of transportation fuels with higher level blends of renewable fuels at the retail level.

After reviewing the petition submissions, other available data and letters opposing changing the point of obligation from companies and associations involved in the renewable fuel production, fuel distribution and renewable fuel blending industries,¹²² and the many comments received on the proposed denial, we continue to believe that the benefits to renewable fuel blending claimed by the petitioners are highly unlikely to occur. As explained below, the data available to EPA does not indicate that changing the point of obligation would result in an increase in the infrastructure needed to blend renewable fuels at terminals or offer these fuels at retail stations, nor would it be expected to appreciably impact the price of renewable fuel blends at the retail level. While we have received comments from large renewable fuel producers¹²³ and associations representing renewable fuel producers¹²⁴ opposing changing the point of obligation, only a few renewable fuel producers or associations have expressed support for changing the point of obligation.¹²⁵ Some of the renewable fuel producers that supported changing the point of obligation appeared to do so conditionally, requesting that EPA consider factors such as increasing requirements for renewable fuel use and promoting predictability and stability for all sectors in our decision on the point of obligation.¹²⁶ Other renewable fuel producers acknowledged the potential concerns with changing the point of obligation while expressing the belief that changing the point of obligation could lead to positive outcomes, and concluded by simply requesting that the EPA consider a rulemaking process to receive stakeholder input on this issue.¹²⁷ Since renewable fuel producers would stand to gain from any RFS structural changes that would increase the distribution and use of renewable fuels, their general opposition to a change in the point of obligation is significant.

¹²¹ Several petitioners and commenters did address this issue in their comments on the proposed denial of the petitions to change the Point of Obligation in the RFS program. These comments are addressed in Section III.F below.

¹²² See Presentation from Murphy USA to EPA, August 16, 2016; Letter from RaceTrac to Administrator McCarthy, August 17, 2016; Letter from QuikTrip to Administrator McCarthy, August 17, 2016; Letter from Tim Columbus to Administrator McCarthy, August 15, 2016; Letter from Pilot Flying J to Administrator McCarthy, August 16, 2016; Letter from SIGMA and RFA to Congressmen Whitfield and Rush, June 30, 2016.

¹²³ Comments from REG on the proposed RFS standards for 2017 and the biomass based diesel standard for 2018 (EPA-HQ-OAR-2016-0004-3477).

¹²⁴ Letter from SIGMA and RFA to Congressmen Whitfield and Rush, June 30, 2016.

¹²⁵ For example, see comments submitted by Valero Renewable Fuels Company, EPA-HQ-OAR-2016-0544-0413.

¹²⁶ For example, see comments from Crimson Renewable Energy, EPA-HQ-OAR-2016-0544-0376.

¹²⁷ For example, see comments from AgriFuels, EPA-HQ-OAR-2016-0544-0210.

Additionally, the EPA notes that the agency did not exercise the general waiver authority on the basis of inadequate domestic supply in establishing the 2017 RFS standards, and did not propose to do so for the 2018 standards. Thus, EPA established for 2017, and proposed for 2018 EPA, volume reductions that are attributable to insufficient production of cellulosic biofuel. We do not believe that this type of shortfall would be reduced or alleviated by a change in the point of obligation. Thus, the focus of the petitioners on potential impacts of a change to the point of obligation on distribution and use of renewable fuels such as ethanol and biodiesel is not even directed at the primary hurdles facing renewable fuel growth under the RFS program going forward. Finally, the United States Court of Appeals for the District of Columbia Circuit recently ruled that EPA's interpretation of the "inadequate domestic supply" portion of its waiver authority in developing the 2016 total renewable fuel standard was inappropriate, and that in the future EPA may only consider "supply-side factors: in assessing if an "inadequate domestic supply" of renewable fuel exists.¹²⁸ Therefore, to the extent that petitioners claim that a change in the point of obligation would overcome constraints in the distribution of renewable fuel from refiners, importers or blenders to consumers, or in the use of renewable fuel by consumers, it does not appear that this would lead to a difference in EPA's use of the inadequate domestic supply waiver authority under the direction EPA recently received from the DC Circuit. For these and other reasons, as discussed below, contrary to the petitioners' claims, the EPA believes that the production, distribution, and use of renewable transportation fuels is unlikely to be positively impacted by changing the point of obligation in the RFS program.

Before assessing the potential impacts on renewable fuel production, distribution, and use in the subsections that follow we first address the EPA's statutory authority to place the point of obligation on various suggested parties.

A. Some of the Proposed Changes to the Point of Obligation Are Inconsistent with the CAA

EPA believes that certain of the proposed changes to RFS point of obligation are inconsistent with the Clean Air Act. Although we note these inconsistencies here, we emphasize that our denial of the petitions is not dependent on this legal analysis. For the reasons described elsewhere in this document, the EPA would deny the petitions seeking a change in the point of obligation even if it concluded that it had legal authority to enact the suggested changes.

In its petition for reconsideration, the Coalition recommends that the EPA move the point of obligation to "blenders and distributors" without addressing EPA's authority to do so consistent with CAA 211(o)(3). See Coalition Petition, p. 14. In its petition, the Coalition cites text from CAA 211(o)(2)(A)(iii) indicating that the regulations EPA establishes to implement the RFS program "shall contain compliance provisions applicable to refineries, blenders, distributors, and importers, as appropriate." The Coalition suggests that including "distributors" in this list of entities regarding which compliance provisions may be established would authorize the EPA to establish the point of obligation for compliance with the RFS annual standards on distributors. However, the Act includes a different provision specifically identifying the parties that may be

¹²⁸ See *Americans for Clean Energy v. Environmental Protection Agency*, No. 16-1005, Slip Op. 31-32 (D.C. Cir. July 28, 2017) ("ACE").

required to comply with the annual percentage standards. CAA 211(o)(3) describes the requirement for the EPA to establish annual standards under the Act, and provides that “[t]he renewable fuel obligation . . . shall . . . be applicable to refineries, blenders, and importers, as appropriate.”¹²⁹ Distributors are excluded from this list. Reading these two provisions together, EPA’s interpretation is that it has authority to establish ancillary compliance provisions which apply to distributors, but it does not have authority to make distributors directly subject to the annual percentage standards.^{130, 131}

A number of Petitioners and other commenters suggest that the point of obligation be placed on “position holders.”¹³² They explain that “position holders” may or may not be blenders, but they argue that because all “position holders” could be blenders, the EPA has the authority to impose the point of obligation on them. They propose that the “obligation [would attach] whether a party actually blends or not,” and explains that their proposed definition of obligated party “does not even make actual blending critical.”¹³³ In comments, Petitioners suggested that the EPA has broad authority to obligate “position holders” as a subset of blenders because they “control the point of blending.” Commenters also suggested that the EPA could redefine “refiner” and “refinery” to include “position holders.” Some commenters suggested that the EPA’s past consideration of its authority to impose the point of obligation on downstream parties means the EPA must have the authority to regulate “position holders.”

The EPA does not interpret CAA 211(o) as authorizing it to make “position holders” subject to the renewable volume obligation if they are not blenders, importers or refiners. EPA received comments from the Association of American Railroads, the American Trucking Association and UPS indicating that they or their members are not refiners, importers, or blenders, and yet would be obligated under the proposed definition of obligated party because they are “position holders.”¹³⁴ A “position holder” may have authority to decide whether or not to blend renewable fuel into non-renewable fuel at a particular terminal, but EPA does not interpret the term

¹²⁹ CAA 211(o)(3)(B)(ii)(I).

¹³⁰ We believe that moving the point of obligation to distributors in addition to, or in the alternative to, blenders and “position holders,” would result in imposition of the obligation on a large number of new parties, including small businesses. As discussed in Sections II.E. and IV, we believe that this would be a generally undesirable result, unless it could clearly be demonstrated that such a change would result in net benefits, potentially including the increased production, distribution and use of renewable fuels. However, for the reasons discussed elsewhere, including in Sections III.B.-E., we do not believe that this would be the case.

¹³¹ EPA notes that the Coalition has moved away from this interpretation in its comments, and instead advocates that the definition of “obligated party” should be changed to obligate “position holders.” In their comments on the RFS 2014-2016 final rule, they urged EPA to place the obligation on “position holders,” Comments from Small Refiners Coalition Comments on Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017, HQ-OAR-2015-0111-2339, and in the comments on the proposed denial, the Coalition also suggested that EPA define “obligated party” to include “position holders.” Comments from Small Refiners Coalition, HQ-OAR-2016-0544-0406, 5. In the alternative, the Coalition argues that EPA clearly has the authority to obligate all blenders. *Ibid.*

¹³² In its petition, Valero uses the term “rack sellers” to represent those parties who own fuel above the rack. As mentioned above, we have chosen instead to use the term “position holders” to describe these parties.

¹³³ Valero Petition for Rulemaking, June 13, 2016.

¹³⁴ Comments from Association of American Railroads, EPA-HQ-OAR-2016-0544-0359; Comments from American Trucking Association, EPA-HQ-OAR-2016-0544-0355; Comments from UPS, EPA-HQ-OAR-2016-0544-0076.

“blender” in CAA 211(o) as describing anyone who is in a position to choose whether or not to engage in blending, but rather as describing those parties who actually engage in blending.¹³⁵ EPA also does not believe it would be appropriate to redefine the terms “refiners” and “importers” to include “position holders” who do not engage in any refining or importing. Such an approach would not be consistent with EPA’s existing regulatory definitions or common industry usage. In sum, EPA does not interpret the CAA as authorizing it to place the point of obligation on all “position holders” or distributors, since they are not all refiners, importers or blenders. Of course, EPA does have authority to place the point of obligation on blenders (which would include the majority of the “position holders”), but for reasons discussed further below we continue to find it appropriate not to do so.

B. Renewable Fuel Production, Distribution, and Use Does Not Appear to Be Significantly Limited by Blending Infrastructure

One of the ways that the petitioners claim renewable fuel production, distribution, and use could be positively impacted by changing the point of obligation in the RFS program is by increasing the incentive for the installation and expansion of renewable fuel blending infrastructure, especially at terminals. The petitioners claim that the current point of obligation results in a number of parties that are either “naturally long on RINs,” because they are obligated parties that blend renewable fuels at volumes above their RFS obligations (generally because they blend renewable fuel into more petroleum products than they refine or import), or because they blend renewable fuels but are not obligated parties under the RFS program. According to the petitioners and some commenters, these parties have an incentive to oppose the installation and expansion of infrastructure needed to increase the blending of renewable fuels into transportation fuel in an effort to restrict RIN availability and drive up RIN prices.¹³⁶ The EPA has investigated these claims and does not find them to be supported. We acknowledge that some parties may be hesitant to contribute financially towards the addition of new infrastructure at terminals to increase the availability of higher level blends of renewable fuels due to insufficient local demand for these fuels (in the case of E85) or previous investment in infrastructure to offer these blends outside of the terminal (in the case of biodiesel). As discussed further in Section III.C below, we do not believe the addition of such infrastructure would be likely to increase the availability of RINs to such a degree that it would appreciably impact the price of RINs. It is therefore highly unlikely that any opposition to additional blending infrastructure at terminals is driven by a desire to restrict RIN availability which could theoretically result in higher RIN prices.

The EPA spoke with several terminal owners/operators to assess the current status of renewable fuel blending infrastructure at terminals.¹³⁷ Currently all, or nearly all, terminals contain the necessary infrastructure for the onsite storage of ethanol and the blending of ethanol with

¹³⁵ A decision to treat people as having engaged in an activity simply because they have the opportunity to engage in it would be quite unusual. For example, a landowner not making active use of their land would not normally be considered a “farmer” simply because they could decide in the future to engage in farming.

¹³⁶ For example, see *Effects of Moving the Compliance Obligation under RFS2 to Suppliers of Finished Products*, NERA Economic Consulting, July 27, 2015.

¹³⁷ See Magellan Meeting Notes, December 16, 2015; Independent Fuel Terminal Owners Association meeting notes, January 8, 2016; Kinder Morgan meeting notes, January 22, 2016.

gasoline. This infrastructure is generally used to blend petroleum blendstocks with 10% ethanol by volume to produce a finished E10 blend. Some terminals have invested in additional infrastructure, such as additional ethanol storage capacity and/or larger capacity lines and nozzles, to more readily accommodate the production of fuel blends that contain a higher proportion of ethanol, such as E85. Even without this additional infrastructure, however, all of the terminal owners/operators communicated to the EPA that they were capable of producing fuel blends that contain a higher proportion of ethanol with their existing equipment. They also expressed a willingness to make the relatively modest changes necessary to accommodate faster loading times¹³⁸ if the existing infrastructure resulted in loading delays for trucks at the rack. Based on these conversations, as well as the comments received, EPA does not believe that blending infrastructure at terminals is a significant factor limiting the sale of higher level ethanol blends. EPA further notes that the preponderance of ethanol produced and used in the United States is conventional (non-advanced) ethanol, and since EPA determined that the implied statutory volume of 15 billion gallons of conventional fuel would be supplied in 2017 and has proposed a similar finding for 2018, that increases in ethanol distribution infrastructure does not appear necessary to attain the statutory volume targets for conventional and non-cellulosic advanced biofuels.

Biodiesel blending infrastructure at terminals is less universal than ethanol blending infrastructure, but substantially more blending occurs downstream of terminals for biodiesel as compared to ethanol. Production and use of biodiesel has been steadily increasing in recent years, and there is a paucity of evidence suggesting the lack of blending infrastructure poses an obstacle or constraint on further biodiesel use. In fact, biodiesel blending is well above the required volume. While we were unable to determine precisely what percentage of terminals have biodiesel blending infrastructure, the terminal owners/operators generally communicated that they were willing to install biodiesel blending infrastructure at terminals in situations where biodiesel is available and they could reasonably expect a return on these investments.¹³⁹ A review of publicly available information from OPIS suggests that approximately half of all terminals list prices for biodiesel and/or biodiesel blends.¹⁴⁰ This may in fact under-estimate the actual availability of biodiesel blends at terminals as diesel fuel containing up to 5% biodiesel is not required to be labeled as a biodiesel blend.¹⁴¹ In situations where biodiesel blending infrastructure is not present at terminals, other parties have invested in alternative blending infrastructure to produce biodiesel blends downstream of terminals, further increasing the availability of biodiesel blends. Several large truck stop chains, driven by a desire to offer their customers lower priced fuel, have invested in infrastructure at retail locations to provide biodiesel blends for that location, and in some cases at other nearby retail stations.¹⁴² Similarly, “jobbers” may take diesel fuel from bulk terminals and blend it with biodiesel before subsequent

¹³⁸ Because most ethanol blending infrastructure is currently designed to produce E10 blends, producing higher level blends using the existing infrastructure can require longer loading times.

¹³⁹ Magellan Meeting Notes, December 16, 2015.

¹⁴⁰ See OPIS Rack City List (<http://www.opisnet.com/resources/rackcode.aspx#biodiesel>). Approximation made by comparing the number of cities for which OPIS lists gasoline and diesel prices to the number of cities for which OPIS lists biodiesel prices.

¹⁴¹ See ASTM D 975.

¹⁴² See National Biodiesel Board comments on 2017 Annual Standards Rule; Attachment 6 (EPA-HQ-OAR-2016-0004-2904).

distribution, providing another opportunity for biodiesel blending.¹⁴³ In these cases it is unclear what impact, if any, changing the point of obligation to “position holders” would have on the availability of biodiesel blends as the current regulations appear to be providing a substantial incentive for parties to invest in biodiesel infrastructure, both at terminals and at other downstream locations.¹⁴⁴ As noted earlier, the required volume of biomass based diesel for 2017 is twice the statutory minimum volume. To the extent that renewable fuel use may be currently constrained by insufficient blending infrastructure we do not believe that changing the point of obligation would result in the additional investments claimed by the petitioners, as many of the parties that would become obligated if the petitioners’ requests were granted are already investing in blending infrastructure. While the EPA continues to believe that there may be parts of the country that have limited or no access to biodiesel or biodiesel blends, this is generally the result of the higher expense and logistical complications associated with transporting biodiesel or biodiesel blends long distances to areas with little or no local biodiesel production, rather than an inability or unwillingness to invest in the necessary blending infrastructure, either at or downstream of the terminals. Furthermore, such cases continue to decline as a result of the continuing investment in biodiesel distribution infrastructure.

The EPA received comments claiming that changing the point of obligation would likely increase investment in biodiesel blending infrastructure at terminals, and that this would lead to higher biodiesel use in the United States.¹⁴⁵ Commenters claim that the most cost effective point to blend biodiesel is at the terminal, but that currently obligated parties with sufficient RINs and/or unobligated blenders are blocking the installation of additional biodiesel blending infrastructure at terminals. If the point of obligation were changed, they argue that the equal obligations at the rack would result in greater investment in biodiesel blending infrastructure at the rack. In his comments Mr. Jobe, president of Rockhouse Advisors, argues that because most biodiesel blending currently takes place downstream by a relatively small number of large companies this allows these companies to realize significant profits by keeping biodiesel prices low and/or keeping D4 RIN prices high.¹⁴⁶ He further argues that the current point of obligation discourages domestic biodiesel by encouraging the import of biodiesel at a lower cost, and that moving the point of obligation could benefit domestic producers by moving the demand for biodiesel away from the coasts to the approximately 1,000 terminals around the country.

The EPA believes it is highly unlikely that the many claimed benefits to the biodiesel industry associated with changing the point of obligation would occur. All or nearly all of these claimed benefits are dependent on additional investment in biodiesel blending at terminals. However, as Mr. Jobe notes in his comments, the response to increasing RFS requirements for biomass-based diesel and advanced biofuel has primarily been to increase biodiesel blending capacity downstream of the terminals. This is likely occurring because the parties that are currently blending the majority of the biodiesel have determined that it is more cost effective to blend

¹⁴³ Ibid.

¹⁴⁴ However, changing the point of obligation to “blenders” would make every truck stop or fuel retailer that blends biodiesel subject to the RFS. This could result in a reduction in downstream blending of biodiesel (as these parties concluded it was no longer worthwhile to engage in blending), or else could bring a large number of small entities, with little relevant compliance experience, into the RFS program.

¹⁴⁵ See, e.g., comments submitted by Joe Jobe, President of Rockhouse Advisors, LLC, EPA-HQ-OAR-2016-0544-0271.

¹⁴⁶ Ibid.

biodiesel downstream of the terminal, rather than at the terminal itself, and not because a small number of companies are exercising market power to reap excess profits. This is the case even though the majority of obligated parties (refiners and importers) are “position holders,” and would stand to benefit by adding biodiesel blending infrastructure at terminals if this were likely to result in lower cost compliance options. Further, Mr. Jobe does not present compelling evidence that the current price of biomass-based diesel RINs is the result of a relatively few large biodiesel blenders ability to artificially inflate RIN prices. Rather, the high price of biomass-based diesel RINs is generally the result of the relatively high cost of biodiesel production due to the high cost of the marginal feedstock (generally virgin soy oil) relative to petroleum diesel.¹⁴⁷

If the EPA were to change the point of obligation to “position holders” it would result in increased obligations for many of the parties that currently sell gasoline and diesel at the rack, including both those that are currently obligated parties and those that are not.¹⁴⁸ Mr. Jobe claims this would increase the incentives for parties who sell gasoline and diesel at the rack to invest in biodiesel blending infrastructure at the rack, as they would now all be “RIN-short” and would need additional RINs to meet their RFS obligations.¹⁴⁹ However, if the majority of the biodiesel blending (and thus BBD RIN separation) is currently occurring downstream of the rack by parties such as truck stop owners with little to no RFS obligations, as claimed by the commenters and supported by the data they present, this strongly implies that most obligated parties currently selling gasoline and diesel at the rack are already “RIN-short” with respect to biomass-based diesel RINs and must obtain at least some portion of their required BBD RINs through purchasing separated RINs.¹⁵⁰ It follows that because most parties that sell gasoline and diesel at the rack are likely RIN-short with respect to their biomass-based diesel obligations, that terminals should already have a significant incentive to add biodiesel blending infrastructure. There are two cases in which this would not be true; if purchasing separated RINs from the large unobligated blenders is a more cost effective way of acquiring D4 RINs than adding biodiesel blending infrastructure at the terminal, or if the unobligated blenders are sufficiently able to block the installation of the necessary infrastructure. If the former is the case, it appears unlikely that changing the point of obligation will cause parties to choose a more

¹⁴⁷ According to USDA’s August 25, 2017 National Weekly Ag Energy Round-up the price for crude soybean oil was approximately \$0.34 per pound. Each gallon of biodiesel requires approximately 7.5 pounds of feedstock, which would result in a feedstock cost of approximately \$2.55 per gallon of biodiesel produced from soy oil. According to the Energy Information Administration, the spot price for No. 2 ULSD on August 25 ranged from \$1.59 - \$1.73, depending on location. For biodiesel produced from soy oil (likely the marginal gallon of biodiesel) the feedstock cost alone is significantly greater than the wholesale cost of petroleum diesel, before considering other costs of production such as labor, energy, capital recovery, etc.

¹⁴⁸ Currently obligated parties could see their obligations increase if they may sell more fuel across the rack than they currently refine. Because the proposed change to the point of obligation would make the obligation proportional to the amount of fuel sold over the rack, this could result in an increase for rack sellers in this position.

¹⁴⁹ Mr. Jobe’s comment also appears to assume increasing RFS standards that would require obligated parties to continue to increase renewable fuel blending in subsequent years. If the standards do not increase substantially there would be no incentive to expand renewable fuel distribution infrastructure beyond what already exists, as using existing infrastructure is more cost effective than installing new infrastructure.

¹⁵⁰ While the IRS data assessed by EPA indicates there are a large number of “position holders” that are currently not obligated parties, the data also indicates that these non-obligated “position holders” are responsible for a very small volume of the gasoline and diesel sold at terminals (see further discussion in Sections IV.A and IV.B). Therefore, in light of the considerable biodiesel blending that occurs downstream from terminals, it is reasonable to assume that the gasoline and diesel sold at terminals is by parties that are generally “RIN-short” with respect to biomass-based diesel RINs.

expensive compliance option. If instead unobligated blenders are able to block the installation of the necessary infrastructure to blend biodiesel at terminals, it seems unlikely that changing the point of obligation will cause the large downstream blenders to abandon their presumably profitable downstream blending operations in favor of participating in infrastructure investments at the rack.

Even if changing the point of obligation were to increase biodiesel blending infrastructure at terminals, the benefits to domestic biodiesel producers that Mr. Jobe claims would result seem highly unlikely. Additional blending infrastructure at terminals would not cause biodiesel blenders to suddenly purchase higher volumes of domestic biodiesel if imported biodiesel continues to be available at lower prices. Demand for biodiesel is much more likely to be impacted by the price of biodiesel (relative to petroleum based diesel) than the availability of blending infrastructure at terminals. As long as significant volumes of low cost imported biodiesel are available we anticipate imported biodiesel will preferentially be purchased and blended over higher priced domestic product, particularly near large ports. In this scenario, obligated parties that sell significant volumes of fuel in the interior of the United States would likely purchase separated RINs to meet their compliance obligations, rather than purchasing and blending relatively high cost domestic biodiesel.

Based on the above information, it appears that renewable fuels and renewable fuel blends are currently widely available across the United States. Ethanol is available at all or nearly all terminals and while much of the blending infrastructure may not currently be optimized to produce higher level ethanol blends, it is capable of such optimization. Biodiesel blending infrastructure is more varied, with many terminals having blending infrastructure on-site, some receiving pre-blended biodiesel, and much biodiesel being blended downstream of terminals. Where biodiesel blending infrastructure does not exist we believe it is primarily the result of the higher expense associated with transporting biodiesel to locations with limited or no local biodiesel production.

In any case, we do not believe that the lack of proper incentives to expand blending infrastructure is a primary factor limiting the production or use of renewable fuels in the transportation sector. While blending infrastructure is not universal at all terminals, the primary issues limiting the production and use of renewable fuels are the status of the production technologies to economically produce cellulosic fuels and to a lesser degree the limited consumer demand for higher level ethanol blends.¹⁵¹ Given the observed sufficiency of blending infrastructure, and the apparent ability of the current regulatory program to incentivize installation of blending infrastructure (whether at or downstream of fuel terminals), the record before us does not support the allegations of petitioners that changing the point of obligation would result in increased use of renewable fuels in the United States as a result of additional incentives or motivation for the installation of blending infrastructure.

¹⁵¹ While low consumer demand for higher level ethanol blends did not require the use of EPA's general waiver authority to reduce the implied statutory volume of conventional biofuel in 2017, or in EPA's proposed rule for 2018, low demand for these fuels could theoretically result in higher RIN prices than would be realized if consumer demand for these fuels were greater. However, as discussed throughout this document, the record before EPA does not demonstrate that changing the point of obligation is likely to result in greater sales volumes of higher level ethanol blends.

C. Changing the Point of Obligation Is Not Expected to Significantly Impact the Retail Pricing of Fuel Blends with High Renewable Content

One of the factors that could affect the expansion of renewable fuel use in the United States, identified both by the EPA in prior actions and by the parties requesting a change to the point of obligation, is the retail pricing of fuel blends that contain higher concentrations of renewable fuel, such as E85.¹⁵² This is primarily an issue for fuels blended with ethanol. Biodiesel blends tend to be offered at a discount to petroleum based diesel fuel and this discount, which is significantly enabled by the value of the RINs associated with the biodiesel and the biodiesel blenders' tax credit,¹⁵³ is regularly large enough to offset the very small impacts that biodiesel blends have on fuel economy. Retailers have often noted the ability to offer biodiesel blends at a discount to petroleum diesel fuel, and the consumer demand for lower priced biodiesel blends, as a primary reason for offering these fuels for retail sale.¹⁵⁴ The relatively high degree of competition among diesel fuel retailers and favorable pricing for biodiesel blends, together with the RFS mandates, are contributing to increasing demand for biodiesel blends and growth in biodiesel production, distribution, and use well beyond the statutory volumes. Consequently, available evidence strongly suggests that the RFS program, in conjunction with other incentives for biodiesel, have been very effective in increasing the supply of biodiesel.

The current retail availability and pricing for E85, however, is significantly different. E85 is currently offered for sale at approximately 3200 stations across the United States (approximately 2% of all retail fuel stations).¹⁵⁵ The low energy density of E85, relative to E10, means that consumers must purchase a significantly greater volume of E85 than E10, and refill their fuel tanks more frequently, to travel the same distance. While some individual stations have offered E85 at a price that more than accounts for the difference in energy density between E85 and E10, this favorable pricing is not generally applicable across the United States.¹⁵⁶ This is despite the fact that in 2015 the relative prices of gasoline blendstocks, ethanol, and D6 RINs, as well as the limited wholesale E85 pricing information available, suggested that E85 could be offered at a price discount greater than the energy content difference between E85 and E10.¹⁵⁷ In a supporting document for the final rule establishing the RFS percentage standards for 2014-2016,

¹⁵² As discussed in Section II.A, the EPA believes that at this time the primary factor constraining attainment of the statutory volume targets is the shortfall in cellulosic biofuel production. EPA did not base the reduced volumes used in establishing the 2017 RFS standards, or the proposed 2018 RFS standards, on any perceived limitation in the ability to distribute or sell E85, and at this time we have no basis for expecting that this limitation would impact future waiver decisions. However, if changing the point of obligation were to lead to the market selling greater volumes of higher level ethanol blends (such as E85 or E15) at lower prices this could potentially reduce the price of D6 RINs, which is perceived by the petitioners as advantageous.

¹⁵³ The \$1/gallon biodiesel blenders tax credit has been available every year from 2010-2016 (in some years the tax credit was reinstated retroactively). Currently, this tax credit is not available for 2017.

¹⁵⁴ Letter from Pilot Flying J to Administrator McCarthy, August 16, 2016.

¹⁵⁵ E85 station count from the U.S. Department of Energy Alternative Fuels Data Center Alternative Fueling Station Locator. Available online at <http://www.afdc.energy.gov/locator/stations/>

¹⁵⁶ See E85 pricing information available at E85prices.com. E85 generally requires a minimum 22% price discount relative to E10 to be an equal cost fuel for consumers on a cost per mile traveled basis.

¹⁵⁷ See discussion in the final rule establishing the RFS standards for 2014-2016 (80 FR 77,420, Dec., 14, 2015).

the EPA examined the potential for higher RFS standards, and the higher RIN prices that could be expected as a result of higher standards, to incentivize lower E85 retail prices and higher sales volumes.¹⁵⁸ In this document we concluded that a lack of competition among E85 retail stations limited the ability for RIN prices to effectively impact retail E85 prices, ultimately limiting the ability of the RFS standards to incentivize a significantly greater supply of E85 to consumers in the near term.

In their requests to change the point of obligation of the RFS program, the petitioners argue that if the EPA changed the point of obligation the RFS standards would have a greater ability to impact the retail price of E85 and incentivize greater use of this fuel. In comments, petitioners and others suggested that obligating downstream parties like “position holders,” and increasing obligations for currently RIN-long parties, could result in more price discounting. We find no basis for the claim that changing the point of obligation would have this effect, nor did commenters submit any data that would support this conclusion. Rather we believe changing the point of obligation would be unlikely to impact the retail pricing of E85. We believe the primary factors inhibiting the RFS program from significantly increasing the supply of E85 to consumers are the limited number of retail stations selling E85 and the relative pricing of E85 versus E10. Further, we believe that the generally non-competitive pricing of E85 at retail is not due to the pricing of E85 at the wholesale level, but is instead the result of the non-competitive retail market for E85. This non-competitive market often results in a not unexpected E85 pricing strategy by retail stations that seeks to maximize fuel margins through withholding RIN value and leading to greater profitability, rather than a strategy that seeks to maximize sales volumes through lower retail prices by passing a greater portion of the RIN value through to consumers. Changing the point of obligation to renewable fuel blenders or “position holders” at the rack is not expected to affect these underlying market fundamentals at retail stations.¹⁵⁹

One of the arguments made by the petitioners, in their petitions and in comments, for changing the point of obligation in the RFS program is that the current point of obligation creates a disincentive for parties with excess RINs (un-obligated blenders and parties that sell more gasoline and diesel fuel blended with renewable fuel than they refine or import) to increase the use of renewable fuels by offering fuel blends with high renewable content at attractive pricing. They argue that because these parties profit from selling RINs they are incentivized to keep the RIN prices as high as possible by restricting the blending of additional renewable fuel and/or pricing fuels with higher renewable content such as E85 at levels that are unattractive to consumers, thereby restricting the supply of RINs. According to the petitioners, if the EPA were to change the point of obligation in such a way that RFS obligations were proportional to the volume of gasoline and diesel fuel that a party blends with renewable fuel and/or sells at the rack, rather than the volume of gasoline and diesel a party refines or imports, these parties would have a greater incentive to pass the RIN value through to retail station owners, who would then pass the value on to E85 consumers, ultimately reducing the retail price of E85 and increasing E85 sales.

¹⁵⁸ “An Assessment of the Impact of RIN Prices on the Retail Price of E85,” Dallas Burkholder, Office of Transportation and Air Quality, US EPA. November 2015.

¹⁵⁹ Even if EPA changed the point of obligation to “position holders” retail station owners would generally not be obligated parties, and thus the change is unlikely to directly impact retail fuel pricing decisions.

The EPA believes this argument is flawed. Because parties that blend renewable fuels or sell fuel at the rack cannot dictate the retail price of the fuels they sell (unless they also own the retail stations), changing the point of obligation of the RFS program would only be expected to directly impact the wholesale pricing of fuels such as E15 and E85. While some of the parties (blenders or position holders) that would become obligated if the EPA were to change the point of obligation as suggested in the petitions own retail stations, many do not. Parties that do not own retail stations, or own very few, primarily impact the retail price of E85, or any fuel, through the prices at which they offer the fuel at the wholesale level. Wholesale pricing data for E85 are currently very limited. However, what information is available, such as the wholesale E85 pricing published by the Iowa Renewable Fuels Association, shows that in Iowa the wholesale price of E85 already largely reflects the discount enabled by the RIN value associated with this fuel (See Figures 2 and 3 below for wholesale pricing for E85 and E10 in Iowa).¹⁶⁰ This is consistent with letters EPA has received from fuel blenders who told the EPA that it is their practice to price all the fuel they sell at the wholesale level, including E85, at a level that reflects the discount enabled by the RIN value in an effort to offer competitively priced fuel.¹⁶¹ The petitioners and commenters did not provide compelling evidence to suggest that a significant portion of the RIN value was being withheld by the wholesale providers of E85. If the RIN value is already being largely reflected in the wholesale price of E85, changing the point of obligation to parties that determine the wholesale pricing of E85 would not be expected to result in improved pricing of E85 at the wholesale level.

Even if changing the point of obligation as requested by the petitioners were to result in improved pricing of E85 at the wholesale level, we believe it is highly uncertain that this would result in improved pricing at the retail level. If pricing for E85 at retail stations does not improve, the constraint on E85 supply to consumers attributable to retail pricing will not be remedied, hindering the likelihood that sales volumes of E85 will increase significantly. The majority of retail stations (56.6%) are owned by parties who own only a single store.¹⁶² These parties rarely, if ever, blend their own fuel or purchase fuel above the rack and therefore will not become obligated parties even if the point of obligation is changed as requested by the petitioners. They would therefore have no more of an incentive to offer E85 at discounted pricing than they do currently. Information reviewed by the EPA for the state of Iowa shows that even in situations where E85 is available at a significant discount to E10 at the wholesale level, the retail pricing of E85 does not reflect this discount.

The data on wholesale and retail pricing of E85 in Iowa, shown in Figures 2 and 3 below, strongly suggest that the relatively small observed discount for E85 relative to E10 at the retail level is not a result of there being a small discount between these fuels at the wholesale level, and would not necessarily be expected to be improved by changing the point of obligation. The average retail price discount for E85 relative to E10 in Iowa was very similar to the national average retail price discount. The average discount for E85 relative to E10 in Iowa at the retail

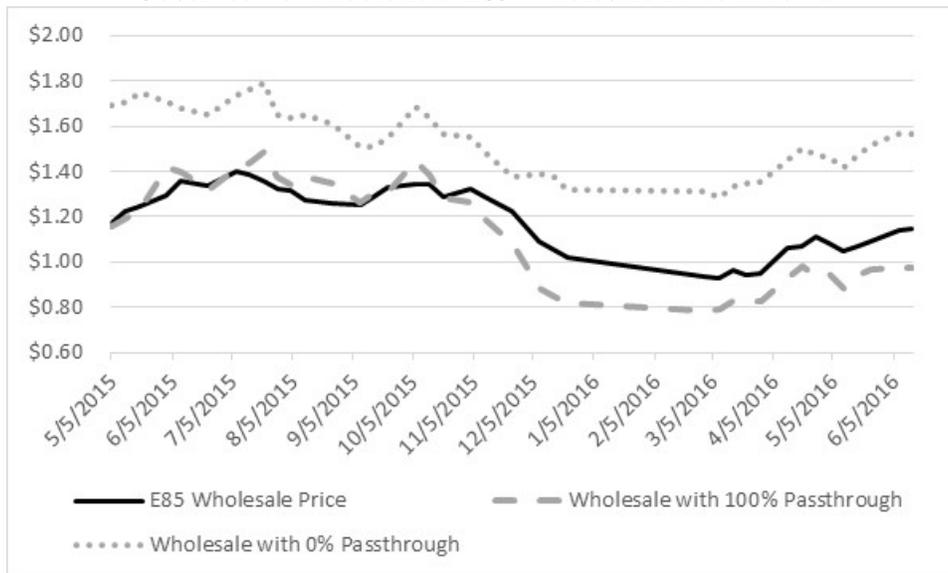
¹⁶⁰ This finding conflicts with the paper prepared by NERA on behalf of Valero (Effects of Moving the Compliance Obligation under RFS2 to Suppliers of Finished Products), however we note that NERA provides no data to support their claim that the value of the RIN is not reflected in the wholesale price of E85. Instead, they simply refer to the fact that the full value of the RIN is not reflected in the *retail* price of E85.

¹⁶¹ See Letter from Tim Columbus to Administrator McCarthy, August 15, 2016; Letter from QuikTrip to Administrator McCarthy, August 17, 2016; Letter from RaceTrac to Administrator McCarthy, August 17, 2016.

¹⁶² http://www.nacsonline.com/YourBusiness/FuelsReports/GasPrices_2013/Pages/WhoSellsGas.aspx

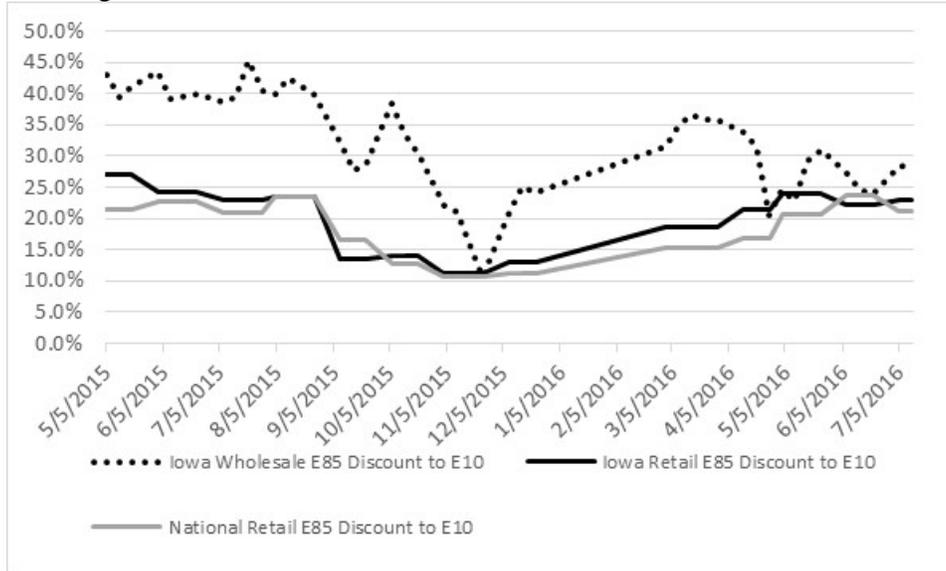
level, however, was much smaller than the average discount for E85 relative to E10 at the wholesale level (See Figure 3 below). Further, the average retail price discount for E85 was less than the discount needed to make up for the lower energy content per gallon of E85 relative to E10 (approximately 22%) during much of this time period. If the wholesale E85 pricing data collected in Iowa are representative of the wholesale pricing for E85 nationwide, which we believe is likely, then the wholesale prices for E85 already reflect the majority of the RIN value and there is very little to no additional RIN value to be passed through at the wholesale level. Even if the nationwide wholesale E85 pricing generally does not reflect the RIN value, and changing the point of obligation could improve the pricing of E85 at wholesale, the data collected from Iowa suggest that significant discounts at the wholesale level would not necessarily be expected to be passed on to the retail level. The available data further support the view that changing the point of obligation in the RFS program is unlikely to result in a greater portion of the RIN value being reflected in the wholesale price of E85, and ultimately the retail price of E85, and will not be an effective mechanism for increasing E85 sales volumes.

Figure 2
Observed vs. Theoretical E85 Wholesale Price in Iowa



Wholesale prices with 100% and 0% pass-through calculated using E10 and ethanol prices from the following sources and assuming the effective ethanol price is discounted by 100% and 0% of the RIN value respectively. E85 and E10 wholesale prices are the average price of all wholesale sellers reported by the Iowa Renewable Fuel Association (Available online at <http://iowarfa.org/retailer-center/iowa-wholesale-e85-price-listing-services/>) Ethanol price from Agricultural Marketing Resource Center (<http://www.agmrc.org/renewable-energy/ethanol/midwest-ethanol-cash-prices-basis-data-and-charts-for-selected-states/>) RIN Prices from OPIS and Argus Media

Figure 3
E85 Pricing: Iowa Wholesale and Retail Price and National Retail Price Averages



E85 and E10 wholesale prices are the average price of all wholesale sellers reported by the Iowa Renewable Fuel Association (Available online at <http://iowarfa.org/retailer-center/iowa-wholesale-e85-price-listing-services/>) National and Iowa E10 and E85 average prices (used to calculate the national and Iowa discounts for E85 relative to E10) obtained from E85prices.com

Further, the petitioners rely on a faulty assumption when they argue that un-obligated blenders are incentivized to restrict RIN availability (by restricting renewable fuel blending) in an effort to keep RIN prices high. They assume that the overall price of RINs could be significantly reduced as a result of the increase in the supply of RINs that they claim would result from a greater proportion of the discount enabled by the RIN value being reflected in the retail price of E85.¹⁶³ The petitioners provide insufficient evidence to support this argument. In fact, some of the comments that EPA received supporting a change to the point of obligation concede that the market for ethanol is highly inelastic due to the limited demand for E85 and other higher level ethanol blends.¹⁶⁴ The EPA estimates that total E85 sales were approximately 150 million gallons in 2014. In our final rule establishing the RVOs for 2014-2016, the EPA estimated, based on available E85 price and sales volume data, that even if E85 were to be sold at retail at a 50% discount to E10 on a nationwide level, a discount more than twice the current national average, E85 sales would still be expected to remain low, just under 300 million gallons.¹⁶⁵

Even if we assume an optimistic scenario, that if parties that are able to acquire excess RINs with the current point of obligation were able to double E85 sales to 300 million gallons per year by passing through a greater proportion of the RIN value, this would represent an opportunity to

¹⁶³ In this section EPA has primarily focused on E85, rather than other ethanol blends such as E15 or E30. This is in response to the petitions we have received, which generally focus on E85. Further, there is much more market experience with E85, relative to E15 or E30, better allowing for the types of analyses shown here.

¹⁶⁴ For example, see comments submitted by NATSO, EPA-HQ-OAR-2016-0544-0282; Chevron, EPA-HQ-OAR-2016-0544-0209

¹⁶⁵ 80 FR 77,420 (Dec., 14, 2015).

generate an additional 110 million RINs per year,¹⁶⁶ or approximately one half of one percent of the total number of RINs generated in 2016. We believe this number provides a perspective on the likelihood that the additional RINs that might be able to be generated by additional sales of E85 would significantly reduce the overall price of RINs. Additionally, in 2016 approximately 240 million D6 RINs were supplied from grandfathered biodiesel and renewable diesel.¹⁶⁷ It is very likely that these were the marginal cost D6 RINs as the RIN price associated with these fuels is governed by the high price of feedstocks used to produce these fuels relative to petroleum. Even if additional RINs could be generated by supplying greater volumes of E85, these additional RINs would only be expected to appreciably reduce the D6 RIN price after displacing these marginal conventional biodiesel and renewable diesel RINs. Since petitioners and commenters provide insufficient information to demonstrate that changing the point of obligation would result in enough additional low cost D6 RINs to displace the high cost D6 RINs currently provided by conventional biodiesel and renewable diesel, the claim that potential additional RINs generated from increased E85 blending would depress the overall D6 RIN price is unsupported.

If any additional RINs supplied to the market through increased sales volumes of E85 are not expected to significantly reduce the market price of RINs, then any parties that profit from E85 and/or RIN sales would maximize their profit by selling as much E85 (and the associated RINs) as possible. This appears to be the case in the current marketplace; parties currently separating RINs in excess of their RFS obligations are seeking to acquire as many RINs as possible as long as the cost of doing so is less than the value they can recover through the sale of the RIN. Although the EPA does not believe that RIN sales by un-obligated blenders lead to windfall profits, to the extent petitioners believe otherwise their own logic would suggest that these parties should currently be incentivized to undertake efforts to increase the sale of renewable fuel blends to increase the number of RINs sold at a profit. If this were the case, changing the point of obligation to blenders could therefore reduce such sales, since blenders would retain RINs for compliance, thereby removing an incentive for them to increase renewable fuel sales and profits.

In summary, the EPA does not find the arguments made by the petitioners compelling, as they do not address what we believe to be the fundamental challenges to significantly increasing the use of renewable fuels in the near term. As discussed in previous sections, the evidence available to the EPA does not indicate that changing the point of obligation would result in greater availability or price discounts for cellulosic biofuels or biodiesel blends. With respect to higher level ethanol blends, supply of E85 to consumers is currently inhibited by the number of retail stations selling E85, the geographic distribution of these stations, and the relative pricing of E85 versus E10 at the retail level. For the reasons discussed in this section, it appears highly unlikely that changing the point of obligation would influence the relative pricing of E85 versus E10. In the next section, we discuss why the EPA does not believe that data support the position that changing the point of obligation would increase the availability of E85 at retail stations.

¹⁶⁶ An additional 150 million gallons of E85 contain approximately 110 million gallons of ethanol (assuming an average ethanol content of 74% for E85) and would therefore generate approximately 110 million RINs.

¹⁶⁷ See *2016 RIN Supply*.

D. Changing the Point of Obligation Is Not Expected to Significantly Impact the Availability to Consumers of Fuel Blends with Higher Renewable Content

In requesting that EPA change the point of obligation in the RFS program, some parties argue that this would result in an increase in the number of retail stations offering higher level blends of renewable fuel such as E85. They generally argue that the renewable fuel blenders and/or “position holders” have greater influence over the decisions made by the retail station owners, either through direct ownership or through contractual relationships. The petitioners and others argue that if the EPA were to place the point of obligation on the blenders or “position holders,” they would use their influence with their retail partners to increase the number of stations offering fuel blends such as E85 in an effort to increase their access to the RINs needed for compliance.

While this argument is generally consistent with the principle that the closer the point of regulation is to the party whose behavior the regulation is intended to impact (in this case the retail station owner) the more effective the regulation is, in this case it ignores the complicated relationships that exist in the fuels marketplace as well as observations from the current marketers of E85. Currently less than 0.5% of all fueling stations are owned by a major oil company, while approximately 50% are branded stations, selling fuel under the brand of a refiner.¹⁶⁸ It is unlikely that blenders and “position holders” would be more effective at encouraging retail stations to offer E85 than the refiners and importers of gasoline and diesel fuel who are affiliated with these stations. This is especially true for the nearly 60% of retail stations owned by single-store owners who are likely to face difficulties raising the capital required to install the equipment necessary to enable the sale of these fuels.¹⁶⁹

The EPA also assessed the current affiliation of stations selling E85 in the proposed denial. The EPA received several comments on that assessment, including one that provided an updated assessment of E85 station affiliation information. EPA has used the information provided in that comment in the revised assessment presented below.¹⁷⁰

Using the information presented in the comments, we find that of the approximately 3200 stations selling E85 in the United States at the end of 2016, approximately 40% of them were branded stations (stations affiliated with a refiner) despite the fact that approximately 50% of all retail fuel stations are branded. Conversely, approximately 47% of all stations selling E85 were not affiliated with an obligated party, 10% were private stations or stations owned by a federal, state, or local organization,¹⁷¹ and 3% were unable to be categorized.¹⁷² Large retail chains, such as Casey’s General Stores, Kwik Trip, and Murphy USA, as well as other unbranded stations are

¹⁶⁸ http://www.nacsonline.com/YourBusiness/FuelsReports/GasPrices_2013/Pages/WhoSellsGas.aspx

¹⁶⁹ Ibid.

¹⁷⁰ Letter from Ron Minsk to Sarah Dunham. February 22, 2017. Submitted as an attachment to comments from Valero, EPA-HQ-OAR-2016-0544-0274.

¹⁷¹ The 10% of E85 stations that were private or owned by a federal, state, or local organization are not included in the 47% of E85 stations not affiliated with an obligated party.

¹⁷² These numbers are based on an assessment of data from AFDC by Ron Minsk, submitted in comments on our proposed denial of the petitions, EPA-HQ-OAR-2016-0544-0145.

not generally obligated parties under the current regulations.¹⁷³ These data do not appear to support claims that moving the point of obligation in the RFS program would result in a greater number of stations selling fuels with higher levels of renewable fuel, such as E85. While there are differences of opinion on the degree to which obligated parties can influence whether or not their branded stations offer E85, if it were the case that an RFS obligation made a party more effective in encouraging their affiliated retail stations to offer fuels containing higher levels of renewable fuel such as E85 we would expect that the stations affiliated with parties with an obligation under the current RFS regulations would have proportionally more stations offering E85 than parties who are not affiliated with a party with an RFS obligation. Instead, we find that while 50% of all retail fuel stations are branded (affiliated with a refiner), only 40% of all stations that sell E85 are branded stations.¹⁷⁴ In contrast, large retail chains often directly own retail stations, thus giving them control of the fuel offerings at the stations they own, and a significantly higher proportion of these stations offer E85 relative to branded stations, as shown below; this suggests that the current point of obligation provides significant incentives for these stations to offer E85 under the right market conditions.

Table III.D-1
Retail Fuel Stations and E85 Stations by Affiliation

	Branded Stations (affiliated ¹⁷⁵ with obligated parties)	Unbranded Stations (not affiliated with obligated parties); Not including private stations	Private Stations	Uncategorized Stations
All Retail Fuel Stations ¹⁷⁶	50%	50%	Unknown	N/A
E85 Retail Stations	40%	47%	10%	3%

Furthermore, while only 50% of all retail fuel stations are not affiliated with refiners, approximately 57% of all E85 stations are not affiliated with refiners. An unbranded station is therefore approximately 17% more likely to offer E85 for sale than a branded station if we exclude consideration of private unbranded stations.¹⁷⁷ Unbranded station are approximately

¹⁷³ Large retail chains could become obligated parties for all or a portion of the petroleum products they sell if the point of obligation were changed to the renewable fuel blender or the “position holder.” These parties purchase fuel above or below the rack depending on the logistics and economics of fuel purchasing and renewable fuel blending at various locations. See, e.g., Comments from Casey’s General Stores, EPA-HQ-OAR-2016-0544-0268.

¹⁷⁴ This number increases to 46% percent of all E85 stations affiliated with obligated parties (vs.54% of all E85 stations not affiliated with obligated parties) if we consider only public stations

¹⁷⁵ For the purposes of this assessment, EPA has defined a station as affiliated with an obligated party (or a non-obligated party) if they use the party’s name for marketing purposes, such as in the name of the station, on the station signage, etc. Affiliated stations may or may not be directly owned by the party with which they are affiliated.

¹⁷⁶ EPA does not have data on the total number of private retail fuel stations in the United States, however it is likely that it is sufficiently small that it does not impact this analysis.

¹⁷⁷ Since the number of branded and unbranded stations are approximately equal, we determined that unbranded stations are approximately 17% more likely to offer E85 than branded stations by dividing the percentage of E85

42% more likely to offer E85 for sale than a branded station if we include private stations in the count of unbranded stations that sell E85.¹⁷⁸ Parties requesting a change in the point of obligation in the RFS program have claimed that such a change would result in an increasing number of retail stations offering E85 for sale. The data does not bear this out, as E85 is offered for sale at a higher rate at unbranded retail fuel stations relative to retail fuel stations that are affiliated with obligated parties. The record before EPA does not contain sufficient evidence to demonstrate that the point of obligation is a significant factor in a retail station's decision whether or not to offer E85.

In his critique of the EPA's assessment of the number of E85 retail stations as branded as compared to unbranded stations presented in the proposed denial, Mr. Minsk argued that in addition to errors in categorization, the comparison presented by the EPA (comparing E85 stations counts at branded vs. unbranded stations) was inappropriate. Mr. Minsk argues that it is more informative to compare the number of E85 retail station affiliated with obligated parties that are "RIN-long" vs. those affiliated with obligated parties that are "RIN-short."¹⁷⁹ Mr. Minsk concludes E85 stations are much more likely at retail station affiliated with RIN-short obligated parties, with E85 offered at 2.7% of all stations affiliated with RIN-short parties (893 out of an estimated total of 31,000 stations), as compared to E85 being offered at 0.9% of all stations affiliated with RIN-long parties (368 out of an estimated 41,000 stations). When focusing only on stations added since 2013, when D6 RIN prices first rose significantly, E85 was added at 460 stations affiliated with RIN-short parties (1.5% of their total of 31,000 stations) while 125 stations affiliated with RIN-long parties added E85 (0.3% of their 41,000 affiliated stations).¹⁸⁰ Mr. Minsk suggests this is evidence that RIN-short parties are more effective at encouraging the availability of E85 at retail stations they are affiliated with, and that moving the point of obligation to the "position holders" (and, if EPA were to set an RVO that effectively requires higher level ethanol blends, thereby eliminating the ability for some parties to obtain the RINs needed for compliance by simply blending 10% ethanol with the gasoline they sell at terminals) would result in more retail stations offering E85, and therefore greater sales volumes of ethanol.

The conclusions reached by Mr. Minsk, however, are not sufficiently supported by the data. First, Mr. Minsk's assessment appears incomplete, as it does not address the majority of the E85

stations that are unbranded by the percentage of E85 stations that are branded. This calculation was then repeated when including the percentage of private E85 stations with the percentage of unbranded E85 stations.

¹⁷⁸ Some parties have used this information to argue that refiners are actively discouraging the installation of E85 infrastructure at their branded stations in an effort to discourage renewable fuel penetration. In examining the data from AFDC, however, EPA notes that the majority of the E85 stations at unbranded fuel retail stations are owned by large companies, rather than single store owners. We believe that the greater access to capital that the stations owned by large companies have relative to single store owners is likely to be a larger factor in the higher rate of adoption of E85 infrastructure at unbranded stations than any influence by refiners or the RFS point of obligation.

¹⁷⁹ In his paper, Mr. Minsk categorizes obligated parties as RIN-long vs. RIN-short primarily based on the volume of gasoline and diesel the obligated parties produce relative to the estimated volume of fuel sold at their associated retail stations. For more detail, see Letter from Ron Minsk to Sarah Dunham, February 22, 2017. Submitted as an attachment to comments from Valero, EPA-HQ-OAR-2016-0544-0274.

¹⁸⁰ EPA questions Mr. Minsk's focus on stations added since 2013. While it is true that D6 RIN prices rose substantially in this year, it is certainly possible that obligated parties could have anticipated that increasing demand for RINs, and associated higher RIN prices, would result from the rapidly increasing RFS statutory volumes. E85 stations added prior to 2013 therefore may have been in response to expectations of higher demand for RIN (and associated higher RIN prices) in the future.

stations (E85 stations not affiliated with any type of obligated party, and therefore affiliated with parties that are by definition “RIN-long” due to their lack of an RFS obligation) despite the fact that these stations outnumber stations affiliated with obligated parties. EPA further notes that Mr. Minsk does not convincingly address the source of motivation that the “RIN-short” obligated parties may have for encouraging their affiliated stations to offer E85. As discussed above, the potential market for E85 is not sufficient to generate enough RINs to drive down the price of D6 RINs. This is especially true as a high RIN price is currently necessary to incentivize E85 sales, and the D6 RIN price is likely currently determined by the marginal gallon of conventional biofuel which we believe is currently conventional biodiesel rather than ethanol sold as E85. If increasing the number of retail E85 stations is unlikely to result in lower D6 RIN prices it is reasonable to question whether there are other factors, unrelated to whether an E85 station is affiliated with a RIN-long or RIN-short obligated party, that may explain why E85 is more likely to be offered at branded stations affiliated with some obligated parties than others. After reviewing the data EPA concludes that retail stations owned by a large company are much more likely to offer E85 than retail stations owned by a party owning a single, or small number of retail, regardless of whether the station is affiliated with a RIN-long or RIN-short obligated party or if the station is branded or not. We do not find this surprising, as installing E85 infrastructure is a capital intensive project and therefore much more likely to occur at stations with significant access to capital (such as stations owned by large companies) rather than at stations owned by single-station owners. We further conclude that the higher prevalence of E85 stations affiliated with RIN-short parties (vs. RIN long parties) is the result of a higher rate of direct ownership of retail stations among RIN-short obligated parties, rather than a desire by RIN-long obligated parties to restrict the availability of D6 RINs.

The four parties categorized by Mr. Minsk as RIN-long (BP, Chevron, Shell, and Exxon) directly own an estimated total of just 458 stations out of the approximately 41,000 affiliated stations.¹⁸¹ Conversely, direct ownership of retail stations is more common among the parties characterized by Mr. Minsk as RIN-short. Through its Speedway brand Marathon directly owns 2,730 retail stations, substantially more than all of the RIN-long parties combined.¹⁸² Similarly Western Refining and MAPCO directly own most or all of their affiliated stations.¹⁸³ While Valero does not currently own many retail stations, the vast majority of the stations affiliated with Valero that offer E85 are owned by CST, a large company that owns approximately 3,000 retail stations.¹⁸⁴ Additionally, a relatively large number of the stations affiliated with Valero (43 of 107) added E85 prior May 2013 when Valero spun off its retail operations to CST brands, meaning these stations may have been directly owned by Valero at the time they added E85.¹⁸⁵ Altogether, of the 893 E85 stations affiliated with RIN-short obligated parties we estimate that over 500 of these stations are directly owned by a RIN-short obligated party or a large retail brand formerly

¹⁸¹ NACS. Who sells America’s Fuel? Available online at:

http://www.nacsonline.com/YourBusiness/FuelsReports/GasPrices_2013/Pages/WhoSellsGas.aspx

¹⁸² <https://www.speedway.com/About/> The vast majority of the stations affiliated with Marathon that offer E85 (321 out of 367) are Speedway stations, See *EPA assessment of E85 stations affiliated with Marathon*.

¹⁸³ See <http://www.wnr.com/about-us> and <https://www.mapcorewards.com/about/>. Based on these websites we estimate that Western Refining owns 429 retail stations (approximately 75% of their total affiliated stations) while MAPCO owns 345 stations (over 95% of their total affiliated stations).

¹⁸⁴ <http://www.cstbrands.com/en-us/OurCompany> See also *EPA assessment of E85 stations affiliated with Valero*.

¹⁸⁵ See also *EPA assessment of E85 stations affiliated with Valero*.

owned by a RIN-short obligated party.¹⁸⁶ Note that this is a higher number of stations than directly owned by all of the RIN-long parties combined.

Apart from whether a retail station is owned by a large company or a party owning a single or small number of stations, there are other factors that likely influence whether or not stations offer E85. For example, 165 E85 stations affiliated with RIN-Short obligated parties (19% of all the E85 stations affiliated with RIN-short obligated parties) are affiliated with either CENEX (149 stations) or CountryMark (16 stations). Stations affiliated with both CENEX and CountryMark are primarily located in the midwest, which may indicate that they have greater access to low cost E85 (as a result of proximity to many ethanol production plants) or the station owners and/or customers may be more inclined to support E85. Further, while it does not appear that CENEX directly owns any retail stations, CENEX is owned by CHS, a large agricultural cooperative that may be inclined to support the addition of E85 at their affiliated stations in an effort to support their core agricultural business. To the degree that increased E85 sales support ethanol prices, and ultimately corn prices, these benefits would be expected to be realized by CHS.

Based on our analysis of the data, EPA concludes that the most predictive factor for whether or not a retail fuel station offers E85 is whether the retail station is owned by a large company or whether a party the owns only a single or a small number of retail stations. Since Mr. Minsk's study does not control for this factor, or other potentially significant factors such as geography, we do not believe his work provides a sufficient basis for concluding that retail fuel stations affiliated with RIN-short parties are more likely to offer E85 than stations affiliated with RIN-long parties. There is thus insufficient support for the claim that changing the point of obligation would significantly increase the rate of growth of the number of retail stations offering E85. Unless consumer demand for E85 increases significantly, the expansion of E85 availability at retail will likely be minimal, except in cases where grant funding or other incentives are available, and any addition of E85 at retail stations is very likely to be at stations owned by parties with significant access to capital. Changing the point of obligation will not impact any of these factors, and therefore is not expected to result in additional availability of E85 at retail.

Additionally, some commenters suggested that other limitations in the market, including the number of flex fuel vehicles, and liability and infrastructure compatibility surrounding E15 use, are key factors limiting the use of fuel blends with higher renewable content that would not be impacted by changing the point of obligation.¹⁸⁷

E. The RFS Program Continues to Create a Significant Incentive for Parties to Invest in the Infrastructure Necessary to Enable Growth in the Use of Renewable Fuels

We believe that the RFS as currently structured provides significant incentives for further growth in the production, distribution and use of renewable fuels and, as discussed elsewhere, we do not believe that the incentives for renewable fuel production, distribution, and use would be greater

¹⁸⁶ A total of 568 E85 stations are affiliated with Marathon, Western Refining, MAPCO, and Valero, however not all of these stations appear to be owned by one of the obligated parties (or CST).

¹⁸⁷ See, e.g., Comments from Cumberland Farms, EPA-HQ-OAR-2016-0544-0160; Comments from Tesoro, EPA-HQ-OAR-2016-0544-0244.

if we were to change the point of obligation. The value of the RIN that is generated when renewable fuels are produced allows fuel blends that contain renewable fuels to be sold at lower prices than would otherwise be possible in the absence of the RFS program. Terminal owners and operators, as well as parties that blend renewable fuels downstream of terminals, are already incentivized to invest in blending infrastructure in an effort to offer their customers the lowest cost fuels possible. Retailers are similarly incentivized to invest in the equipment necessary to offer renewable fuel blends to enable them to offer the widest range of fuel choices. In cases where a lack of competition may inhibit the full value of the RIN from being reflected in the retail price of the fuel, the RIN value can instead provide higher profit margins to the retail station owner to offset their investment in expanding renewable fuel infrastructure. This may ultimately result in more competing retail stations investing in the equipment necessary to offer E85, and with the increased competition retail prices for E85 would be expected to decrease (relative to E10) over time.

Some commenters cited to language in the 2014-2016 final rule indicating that high RIN prices would only result in modest increases in volumes of E85 as evidence that RIN prices cannot drive renewable fuel blending.¹⁸⁸ These commenters take this language out of context. In the 2014-2016 final rule, the EPA was attempting to assess the degree to which an annual volume standard could incentivize additional E85 sales in a single year, not the degree to which the RFS program as a whole can incentivize long term investments that could result in increased renewable fuel availability and use. EPA continues to believe that the RIN value is incentivizing investments to increase renewable fuel use.

F. Changing the Point of Obligation Would Not Be Expected to Increase Cellulosic Biofuel Production

While there continue to be challenges related to the distribution and use of renewable fuels in the United States, the largest single challenge to meeting the RFS program's statutory volumes is the shortfall in cellulosic biofuel production. The supply of cellulosic biofuel for 2018 was projected in the 2018 annual rule proposal to be only 3.4% of the statutory volume for these fuels. The importance of cellulosic biofuels to achieving the overall goals of the RFS program only increases in future years, as over 90% of the growth in the statutory volumes from 2018 to 2022 is expected to come from cellulosic biofuel. Changing the point of obligation would not be expected to address the current research, development, and commercialization challenges that will need to be overcome to enable the production of significant volumes of cellulosic biofuel in future years. Instead, to the degree that it reduces the incentive of the refiners to participate in the commercialization of cellulosic biofuels, changing the point of obligation from primarily refiners, who have significant financial resources and experience in commercializing new fuel production technologies on a large scale, to include many smaller downstream parties without such financial resources or experience may negatively impact the ability of the cellulosic

¹⁸⁸ See, e.g., Comments from CVR, EPA-HQ-OAR-2016-0544-0396, citing *Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017*, 80 Fed. Reg. 77,420, 77,459 (Dec. 14, 2015).

biofuels industry to overcome these challenges.¹⁸⁹ Additionally, we believe that the uncertainty surrounding the RFS program that would likely result from a change in the point of obligation would discourage potential investors from investing in new cellulosic biofuel production technologies and commercial scale production facilities at a time when a number of cellulosic technologies are nearing commercial-scale production.

Some commenters suggested that by changing the point of obligation to the “position holders” EPA would increase the obligation for large integrated refiners, as most of these parties sell more gasoline and diesel at the rack than they refine or import.¹⁹⁰ These commenters argued that changing the point of obligation to the “position holders” would encourage these large integrated refiners to invest in cellulosic biofuels. Other parties, including large integrated refiners, indicated that an increasing RIN obligation for them would hinder their abilities to invest in cellulosic biofuels. Some parties associated with the renewable fuels industry supported EPA’s conclusion that changing the point of obligation to “position holders” could harm investors in cellulosic biofuel production technologies and production facilities close to commercial-scale production.¹⁹¹ Parties arguing that changing the point of obligation to “position holders” would increase investment in cellulosic biofuel development stated that the large integrated refiners have the necessary resources and are most capable of investing in research and development, but currently have no incentive to invest as they can fulfill their regulatory requirements without using cellulosic biofuel. As support for these statements the commenters compare the revenues of large integrated refiners to those of relatively smaller merchant refiners and the fact that several large integrated refiners are currently engaged in R&D efforts. The EPA does not find the arguments that changing the point of obligation to “position holders” would increase investment in cellulosic biofuel development convincing.

While the EPA acknowledges that large integrated refiners have significant revenues it is not clear why integrated refiners should be expected to invest in cellulosic biofuel development while merchant refiners, many of whom have less but still significant resources, should not.¹⁹² The commenters note that several integrated refiners have recently reduced funding of R&D efforts for cellulosic biofuels. They allege that if these parties had relatively greater RIN obligations they would not have scaled back their investment. However, the EPA notes that these companies began investing in cellulosic biofuel R&D at a time when the RFS obligations were much lower than today. These parties did not suddenly reduce their investments after finding themselves with excess RINs. Rather, as the commenters themselves discuss, they have had excess RINs since the beginning of the RFS program. Indeed, if RIN obligations beyond a company’s ability to obtain RINs by blending renewable fuels made a company more likely to invest in cellulosic biofuels, we would expect large merchant refiners such as Valero, Holly Frontier, and PBF Energy, which also have significant resources, to be investing significant sums

¹⁸⁹ See, e.g. Comments from Tesoro, EPA-HQ-OAR-2016-0544-0244, suggesting that a change to the point of obligation could “negatively impact ongoing efforts to spur advanced biofuel production initiatives being pursued by the refining industry.” See also Letter from Tesoro, Ensyn, and Honeywell noting their efforts for a path forward for cellulosic biofuel production.

¹⁹⁰ EPA notes that this change would also decrease the RFS obligation of merchant refiners

¹⁹¹ See, e.g. Comments from BIO, EPA-HQ-OAR-2016-0544-0217.

¹⁹² Valero compares the combined revenue of Chevron and Shell (\$197 billion in 2015) to the combined revenues of Valero, Holly Frontier, and PBF Energy (\$78 billion in 2015), see EPA-HQ-OAR-2016-0544-0274. EPA believes that any of these companies have sufficient revenue to invest in cellulosic biofuel development if so inclined.

in cellulosic biofuels, yet even the commenters acknowledge this is not the case. It appears it is likely that those integrated refiners that reduced their investment in cellulosic biofuel did so after determining that these investments were unlikely to result in long term profits, or that whatever profits could be realized were less than alternative investment opportunities. Finally, we note that because the cellulosic waiver authority in CAA 211(o)(7)(D) requires that EPA establish the cellulosic biofuel volume requirement at the level projected to be produced (if this volume is lower than the statutory volume) and to make cellulosic waiver credits available as an alternative means of compliance when the statutory volume is not in effect, the design of the RFS program provides limited encouragement for parties of any type to invest in cellulosic biofuels. Obligated parties, like all parties, are only expected to invest in cellulosic biofuel to the degree that they believe these investments will be profitable in the long term. We believe that changing the point of obligation to the “position holders,” and thereby placing a greater burden on integrated refiners would be highly unlikely to significantly impact integrated refiner’s investments in cellulosic biofuels.¹⁹³

G. Changing the Point of Obligation Would Not Be Expected to Increase Energy Security

As mentioned above, one of the stated goals of EISA and the RFS program is to increase energy security. Many commenters suggested that the EPA should consider how modifying the definition of obligated party could increase energy security and proposed several ways obligating “position holders” may result in increased energy security. These commenters often cited to comments by Commander Kirk S. Lippold, who suggested that the RFS program is harming US energy security.¹⁹⁴ Commander Lippold claims that the current point of obligation threatens the viability of some refiners, increases fuel costs to the military and other domestic consumers, and stimulates demand for foreign biofuels. EPA finds insufficient factual basis for these claims.

Some commenters suggested that the reason the U.S. has become a net exporter of petroleum fuel in recent years is that obligated parties were exporting fuels to avoid the RIN obligation. Some of these commenters conceded that the RFS played only some part in this, however others attributed the export of petroleum fuel to the RFS program. We do not believe these statements to be accurate, as the decision to export gasoline and diesel from the United States is driven by a desire to realize the maximum profits for these products in the global refined product market. There are no fuel shortages within the United States, so the exported fuel is not being exported at the expense of domestic use, but to find a market offering higher prices for these fuels than the domestic market. (See also Section II.E. for a further discussion of this issue). Changing the point of obligation to “position holders” would not alter these fundamental market dynamics,

¹⁹³ Some commenters suggested that changing the point of obligation could also increase development and investment in advanced biofuel production and use. These commenters did not provide any reasons why a change would result in these increases, and therefore EPA does not find these arguments compelling for similar reasons expressed above regarding cellulosic biofuel. See, e.g., Comments from CVR Energy, EPA-HQ-OAR-2016-0544-0396. In fact, EPA received comments suggesting that a change to the point of obligation would negatively impact ongoing efforts to increase advanced biofuel production. See Comments from Tesoro, EPA-HQ-OAR-2016-0544-0244.

¹⁹⁴ Letter from Cdr. Kirk S. Lippold, to U.S.EPA, EPA-HQ-OAR-2016-0544-0143.

sand therefore would be unlikely to increase the energy security of the United States by decreasing the amount of exports of petroleum fuel.

Other commenters suggested that the current point of obligation would cause refineries to close, with some specifying that merchant refineries would be the most likely to close as a result of the RFS program. Commenters claimed that such closures would threaten American energy independence and national security. They stated that closure of northeast refineries would exacerbate dependence on foreign energy sources and could lead to price spikes in fuel. Commenters also suggested that increasing petroleum prices could harm the Department of Defense and other agencies.

Whether produced by domestic refiners (e.g., Northeast refineries) or imported into the U.S., gasoline and diesel fuel bear the exact same RIN obligation. Thus, there can be no incentive provided by the RFS program for greater dependence on foreign energy sources. Furthermore, The EPA disagrees that the current point of obligation is likely to cause refinery closures, for merchant refiners or any other refiners. Data reviewed by EPA demonstrates that refiners recover the cost of the RIN through higher prices for their petroleum products as discussed in section II.C. However, to further assess whether or not the RFS program, and specifically high RIN prices, might be causing refinery closures EPA examined publicly available data from the Energy Information Administration on refinery closures, deratings, and expansions from 2013 to 2017. We chose these years for our assessment, as this time period corresponds to the years with elevated D6 RIN prices. If the RFS program were causing refinery closures through high RIN prices, they would have been most likely to occur during these years. In its refinery capacity report, the Energy Information Administration (EIA) publishes a list of U.S. refinery shutdowns.¹⁹⁵ The list of refinery closures since 2013 is provided in Table III.G-1 below. As a point of reference, in 2013 there were 143 operable refineries with a total atmospheric crude distillation capacity¹⁹⁶ of 18,560,000 barrels per day in 2013.

¹⁹⁵ Table 13 Refineries Permanently Shutdown by PAD District Between January 1, 1990 and January 1, 2017
<https://www.eia.gov/petroleum/refinerycapacity/table13.pdf>

¹⁹⁶ Total Atmospheric Crude Distillation Capacity is the most commonly used measure of the capacity of a refinery.

Table III.G-1
Refinery Closures (2013-2017)

Company Name	Location	Date of Shutdown	Total Atmospheric Crude Distillation Capacity (bbl/cd)	Asphalt Plant
Hess Corporation	Port Reading, NJ	3/2013	0	No
Axeon Specialty Products LLC	Savannah, GA	12/2014	28,000	Yes
Ventura Refining and Transmission LLC	Thomas, OK	11/2014	12,000	No
Trigeant LTD	Corpus Christi, TX	12/2014	0	Yes
Pelican Refining Company LLC	Lake Charles, LA	1/2015	0	Yes
Antelope Refining LLC	Douglas, WY	12/2016	3800	Yes
Flint Hills Resources LP	North Pole, AK	6/2014	126,535	No

A review of the list of refinery closures that occurred between 2013 and 2017 does not provide a compelling case for hardship caused by the RFS program. Four of the seven refineries are asphalt refineries which do not produce transportation fuels and are therefore not affected by the RFS program. The Flint Hills refinery is located in Alaska, which is exempt from the RFS program. According to a journal article covering the Hess refinery closure, the Hess management attributed the refinery closure to dwindling demand on the East Coast along with heating oil sulfur standards which were phasing in there.¹⁹⁷ The last refinery on the list of refinery closures is the Ventura refinery in Thomas, OK. Reviewing the gasoline production information provided by this company to EPA does not show that the Ventura refinery produced gasoline when this refinery was operating, although the refinery may still have had to comply with RFS program if the refinery produced diesel fuel.¹⁹⁸

While there were very few refinery closures from 2013-2017 (and only one small refinery for which the available information is insufficient to discount attribution to the RFS program), refineries added additional capacity at their refineries. Between 2013 and 2017, the EIA data shows that the U.S. refining industry increased its atmospheric crude oil throughput capacity from about 19 million barrels per stream-day to 19.8 million bbl/stream-day, an increase of more than 4%.¹⁹⁹ A portion of this change in crude oil distillation capacity was for condensate

¹⁹⁷ Bell, Deborah; Hess Port Reading Refinery to Permanently Close Next Month, Woodbridge Patch, January 28, 2013. Available Online: <https://patch.com/new-jersey/woodbridge/hess-port-reading-refinery-to-permanently-close-next-month>.

¹⁹⁸ EPA conducted an analysis looking farther back in time in the draft regulatory impact analysis supporting the proposed Tier 3 emission standards, EPA-420-D-13-002, March 2013. Refineries closed at a far greater rate in years past. For comparison 102 refineries closed over the decade from 1982-1992, 46 from 1992-2002, and 2 from 2002 to 2012.

¹⁹⁹ Table 6 Operable Production Capacity of Petroleum Refineries, January 1, 1988 to January 1, 2017 <https://www.eia.gov/petroleum/refinerycapacity/table6.pdf>

splitting and for asphalt plants which do not produce finished fuels and therefore would not be affected by the RFS program. To focus our analysis more directly on refineries affected by the RFS program, we reviewed changes in individual refinery operable atmospheric crude oil capacity from 2013 to 2017.^{200 201} The results of our assessment (as shown in Table III.G-2 below) show that from 2013 to 2017 refinery expansions outnumbered closures 39 to 4, and atmospheric crude capacity increases were more than 25 times the reductions. Note that this table does not include any added capacity for condensate splitters, any expansion or contraction at asphalt plants, or any expansion or contraction of refineries located in Alaska.

²⁰⁰ Refinery capacity data by individual refinery as of January 1, 2013; Available Online at <https://www.eia.gov/petroleum/refinerycapacity/archive/2013/refcap2013.php>

²⁰¹ Refinery capacity data by individual refinery as of January 1, 2017; Available Online at <https://www.eia.gov/petroleum/refinerycapacity/>

Table III.G-2
Refinery Expansions, Closures, and Derating (2013-2017)
Million Barrels per Stream-Day

Refinery Name	Expansions	Closures/Derating	Net Expansion
ALON USA ENERGY INC	4,000	0	4,000
AMERICAN REFINING GROUP INC	1,300	0	1,300
BIG WEST OIL CO	3,000	0	3,000
BP	4,000	0	4,000
CALCASIEU REFINING CO	25,000	0	25,000
CALUMET	36,000	0	36,000
Chalmette Refining LLC	2,000	0	2,000
CHEVRON	17,000	0	17,000
CHS MCPHERSON REFINERY INC	9,500	0	9,500
CITGO REFINING	0	1,500	-1,500
COUNTRYMARK COOPERATIVE INC	2,600	0	2,600
DELEK REFINING LTD	10,000	0	10,000
ERGON	3,300	0	3,300
EXXONMOBIL	31,000	0	31,000
Flint Hills Resources LP	30,000	0	30,000
HERMES CONSOLIDATED LLC	4,000	0	4,000
HOLLYFRONTIER	27,020	0	27,020
HOUSTON REFINING	0	6,000	-6,000
LIMA REFINING COMPANY	15,000	0	15,000
MARATHON	120,500	0	120,500
MONROE ENERGY LLC	18,000	0	18,000
Motiva	20,000	0	20,000
PASADENA REFINING SYSTEMS INC	9,200	0	9,200
PDV Midwest Refining LLC	5,200	0	5,200
PHILADELPHIA ENERGY SOLUTIONS	0	5,000	-5,000
PHILLIPS 66	31,156	0	31,156
PLACID REFINING CO	23,500	0	23,500
PREMCOR REFINING GROUP INC	5,000	0	5,000
SHELL CHEMICAL LP	10,500	0	10,500
Silver Eagle Refining	100	0	100
SINCLAIR WYOMING REFINING CO	5,000	0	5,000
ST PAUL PARK REFINING CO LLC	19,200	0	19,200
SUNCOR ENERGY (USA) INC	500	0	500
TESORO	27,600	0	27,600
TOLEDO REFINING CO LLC	13,000	0	13,000
TORRANCE REFINING CO LLC	2,000	0	2,000
VALERO	276,500	18,000	258,500
VENTURA REFINING & TRANSMISSION	0	14,000	-14,000
WESTERN REFINING	5,000	0	5,000
WRB REFINING LP	3,000	0	3,000
TOTAL	819,676	44,500	775,176

The review of the individual refinery atmospheric crude capacity changes from 2013 to 2017 does not indicate hardship on the part of the US refining industry, and in fact, suggests that the market conditions in this time period promoted growth. Refiners are generally making investments in their refineries to expand their throughput capacity, suggesting that the US

refining industry is growing and healthy. Furthermore, the refineries which expanded their atmospheric crude oil capacity included small, medium and large refineries, as well as both integrated and merchant refiners. Aggregate refinery expansions totaled about 820 thousand barrels per stream-day (kbbbl/stream-day), but is offset by 31 kbbbl/stream-day of refinery closures and modest derating, for a total of 789 kbbbl/stream-day of added throughput capacity (excluding condensate splitters, asphalt plants, and refineries located in Alaska).

IV. Changing the Point of Obligation Would Significantly Increase the Complexity of the RFS Program

In order to minimize the number of regulated parties and reduce programmatic complexity, the EPA in the RFS1 regulations placed the RFS point of obligation on the relatively small number of refiners and importers rather than on the relatively large number of downstream blenders. We noted then that the designation of downstream ethanol blenders as obligated parties would have greatly expanded the number of regulated parties and increased the complexity of the RFS program unnecessarily.²⁰² The same is true now. For example, consider the current point of obligation: refiners and importers. Identifying on a continuing basis those entities who produce or import gasoline and diesel fuel is relatively straightforward, as their businesses tend to operate from fixed physical locations that change infrequently, and ownership of the companies and assets also change relatively infrequently. In addition, identification and tracking of these entities is facilitated by our regulation of them under other (non-RFS) regulatory programs. However, the situation “downstream” of refiners and importers becomes much more complicated. There are a wide variety and large number of market participants, business practices, and contract mechanisms downstream of refiners and importers, and the parties, practices, and ownerships among entities downstream of refiners and importers are much more variable over time. All of these factors would make imposition of the RFS point of obligation on some subset (e.g. blenders or “position holders”) of parties downstream of refiners and importers substantially more complex than the current system.

In the RFS2 proposal, we requested comment on whether the EPA should move the obligation downstream of refineries and importers to those parties who blend and supply finished transportation fuels to retail outlets or to wholesale purchaser-consumer facilities. In response to the proposal, stakeholders differed significantly. A few refiners, including Valero, expressed support for moving the obligations to downstream parties, while other refiners preferred to maintain the current approach. Blenders and other downstream parties generally expressed opposition to a change, citing the additional burden of demonstrating compliance with the standards, especially for small businesses. They also pointed to the need to implement new systems for determining and reporting compliance, the short lead time for doing so, and the fewer resources that smaller downstream companies have to manage such work in comparison to much larger entities such as refiners. We considered the comments received and concluded based upon the comments and information available to us that it was appropriate to maintain refiners and importers as obligated parties under the amended RFS2 program. In explaining our

²⁰² 72 Fed. Reg. at 23923.

reasoning, we noted once again that changing the point of obligation would likely result in a significant increase in the number of obligated parties under the program.

Several of the petitions received by the EPA cite text from the 2010 Final Rule acknowledging that one of the initial justifications given for placing the obligation on refiners and importers of gasoline and diesel, rather than on parties that are “downstream” of the refineries, was a desire to minimize the number of regulated parties in the RFS program.²⁰³ As the EPA stated in the 2010 Final Rule and Summary and Analysis of Comments, as a matter of regulatory design and implementation, it is desirable both to limit the number of obligated parties, and to limit burdening small businesses.²⁰⁴ These considerations favored placing the point of obligation on the limited number of refiners and importers, rather than the larger number of blenders.

Additionally, as the EPA projected in the proposed RFS2 rule, virtually all downstream blenders are currently subject to RFS registration, recordkeeping and reporting requirements associated with their role as RIN owners. The EPA asked in that proposal whether, in light of this fact, it would be difficult administratively to move the obligation to these parties. The petitioners generally argue that moving the point of obligation to downstream parties would not be difficult, since they are already regulated in some fashion. However, while it is likely the case that all, or nearly all downstream blenders are now regulated parties under the RFS program due to the increased blending of renewable fuels required by the RFS program, the majority of these downstream parties are not refiners or importers and therefore are currently not obligated parties under the RFS program. There is a significant distinction between being a “regulated party” and being an “obligated party” under the RFS program.²⁰⁵

A. The Number of Obligated Parties Would Increase if the Point of Obligation was shifted to “Position Holders” or “Blenders”

Petitioners generally propose to change the point of obligation to “positions holders” and argue that doing so would involve a similar number of obligated parties or could reduce the number of obligated parties as compared to the number of obligated party refiners and importers that exist today. Petitioners provided EPA with an analysis to support their argument. Petitioners also argue that this proposed change would be relatively easy to implement because the number of

²⁰³ 75 Fed. Reg. 14721 (March 26, 2010).

²⁰⁴ *Ibid.*; Renewable Fuel Standard Program (RFS2) Summary and Analysis of Comments, EPA-420-R-10-003 (February 2010), at 3-216.

²⁰⁵ Downstream blenders who blend renewable fuel into transportation fuel and own RINs at blending must report the quantity of RINs purchased, separated from renewable fuel, and sold according to the reporting requirements under 40 CFR 80.1451(c). They must also register with the EPA under 80.1450 and keep records as required under 80.1454. Small blenders can also shift the compliance burdens if they qualify under 40 CFR 80.1440. Obligated parties must meet all of these requirements and also calculate an annual renewable volume obligation, acquire the appropriate number of RINs in the market, practicing due diligence to ensure their validity, file annual compliance reports demonstrating compliance, and maintain records to that effect.

obligated parties would at least remain relatively the same, if not decrease.²⁰⁶ But as discussed in more detail below, we believe that Petitioners' suggested change would result in a significant increase in the number of obligated parties. More importantly, we believe that the type of parties Petitioners seek to shift the point of obligation to, and their experience level and available resources indicate that implementing Petitioners' proposed change would result in a less effective RFS program that would be more difficult to implement and enforce.

As discussed above, the EPA believes that all else being equal, placing the point of obligation on a smaller number of obligated parties with significant financial resources and expertise in fuels markets is preferable to placing it on a larger number of relatively small entities. This approach facilitates program effectiveness by limiting the number of entities the EPA must interact with to provide guidance and to ensure compliance. It also places the burden on the larger, more sophisticated entities that are more likely to have the personnel and systems in place to enable compliance.

In the proposed denial, the EPA argued that the number of obligated parties would increase significantly if the point of obligation under the RFS Program were changed from refiners and importers to "position holders" at the rack. We cited our discussions with terminal operators and associations and our own data on oxygenate blenders for reformulated gasoline (RFG) to estimate that the obligated party count would increase from around 150 to between 350 and 1,000. The EPA argued that a higher number of obligated parties, many of whom would have less expertise and fewer resources to provide oversight to the RIN program to help ensure the validity of RINs than the current obligated parties, could result in greater non-compliance and RIN fraud. This could negatively impact the ability of the RFS program to achieve its statutory goals. A larger number of obligated parties would also result in higher compliance monitoring and assistance costs, among other key market and policy concerns.

In its petition, Valero stated that moving the point of obligation to the "position holder" would not increase the obligated parties above 200, based on their extensive knowledge of all players in the fuel blending and sales industry. In its analysis, Valero aggregated all entities to the parent company level to come up with the 200 count. We note that this may not be an "apples to apples" comparison with the number of obligated parties under the current RFS regulations, as not all parties comply with their RFS obligations at the parent company level. EPA attempted to aggregate the list of obligated parties in 2016 to the parent company level to provide a count comparable to Valero's estimate. Based on this assessment there were approximately 97 obligated "parent companies," after aggregating the full list of obligated parties; significantly less than the estimate provided by Valero.²⁰⁷

• ²⁰⁶ See Valero Petition for Rulemaking, June 13, 2016, EPA-HQ-OAR-2016-0544-0008, Attachment D and E. See also report by IHS Global Insight, Inc., submitted by Monroe, EPA-HQ-OAR-2016-0554-0368, Attachment J (claimed as CBI).

²⁰⁷ *RFS 2016 Obligated Parties*. This document contains information claimed as CBI.

During and after the comment period, the EPA engaged with the IRS to obtain more concrete information about the count of “position holders.” Since several of the petitioners and commenters suggested changing the point of obligation to the “position holders,” this information would allow EPA to determine the number of obligated parties that would result from changing the point of obligation to the “position holders.” IRS reviewed the data it maintains on “S” registrants, which is defined by the IRS to include, using their definitions, enterers, position holders, refiners, terminal operators, or throughputters of gasoline, diesel fuel (including a diesel-water fuel emulsion), or kerosene, or industrial users of gasoline.²⁰⁸ The IRS noted that they cannot identify which type of actor an “S” registrant is (enterer, position holder, refiner, etc.). The EPA notes that, utilizing IRS definitions, refiners (those that break bulk at a refiner gate), position holders (those that break bulk at a terminal), and enterers (those that import fuel through means other than at a terminal such as truck are the actors that would become obligated parties if the point of obligation shifted to “position holders” as proposed by petitioners and as the term is used in this document. Terminal operators and throughputters would not become obligated parties if the point of obligation shifted to “position holders” as proposed by petitioners, as these parties do not hold title to the gasoline or diesel fuel immediately prior to the sale of these fuels at the terminal.²⁰⁹ If a terminal operator or throughputter “breaks bulk,” in a given quarter, they are categorized for that quarter as a position holder or refiner. “S” registrants file Form 720, the Quarterly Federal Excise Tax Return, to report the quantity of fuel they own. EPA requested the number of “S” registrants who paid taxes as owners of gasoline or diesel, to represent the potential number of obligated parties if the point of obligation shifted to “position holders” as proposed by petitioners because the RVO applies to volumes of gasoline and diesel (“S” registrants that do not own any gasoline or diesel in any given year would not pay taxes or have an RFS obligation for that year).

Information received from the IRS included the following:

- For fiscal year 2015, there were 1,571 “S” registrants, of which 715 filed Form 720 tax forms.²¹⁰
- In calendar year 2016, 443 of the Form 720 tax filers paid taxes as owners of gasoline or diesel.²¹¹
- There is approximately a 30 percent turnover in number of parties that pay taxes as owners of gasoline or diesel from year to year.²¹²

²⁰⁸ The IRS definition of “position holder” is different than how the term is used in this document, and how it is used by petitioners. The IRS definition applies only to parties who hold title to fuel above the terminal rack. Refiners who hold title to fuel above the refinery rack are a separate entity (“refiners”) under IRS definitions.

²⁰⁹ Using IRS terminology, these parties do not “break bulk”

²¹⁰ Not all parties that filed a Form 720 tax form paid taxes as owners of gasoline or diesel

²¹¹ Some of the 720 tax filers paid taxes on fuels other than gasoline or diesel, and therefore would not likely become obligated parties if EPA changed the point of obligation to the “position holder”

²¹² This estimate of annual turnover was provided to EPA by IRS. It is not calculated using the information in the preceding bullets.

Based on this information, the EPA has concluded that the best estimate for the number of parties that would have been obligated parties in 2016 if EPA changed the point of obligation to the “position holders” is approximately 443. The 30 percent turnover in program participations from year to year implies that the obligated parties could be quite variable year over year. Although the total number of obligated parties would likely be around 450 per year, the EPA would still need to track the parties who may have been obligated in previous years, and account for movements in and out of the RFS program. For example, if 30% of the “position holders” changed from 2016 to 2017, we would expect that there would be a total of approximately 576 parties that were “position holders” over a two year period.²¹³ Assuming the EPA adopted the approach to reporting currently utilized by the IRS, as suggested by many petitioners and commenters, we would expect approximately 450 obligated parties in any given year along with a large group of parties we would need to consider as “potentially obligated parties” (at least 133²¹⁴ based on turnover in a single year, and likely many more) based on their prior year’s activities. Since IRS cannot share data on the identity of the Form 720 tax filers nor on the volumes of gasoline or diesel they move over the rack this would cause significant enforcement challenges for EPA, especially as many of these parties would likely be difficult to identify. In calendar year 2016, there were 120 obligated parties under the current RFS regulations;²¹⁵ a change to obligate “position holders” would more than double the number of obligated parties. The matter would be even more complex for EPA administration in light of the additional potentially responsible parties whose activities EPA would likely feel obligated to monitor to some degree to verify whether they should be obligated parties in any given year, assuming these parties could be identified. As such, the EPA continues to believe that the obligated party count would increase significantly, and program administration would be considerably more complex, under the petitioners’ proposal.

The EPA received several comments that challenged EPA’s assertion in the proposed denial that an increase in the number of obligated parties would result in a higher administrative burden on the EPA, in part because it would increase the number of annual compliance reports for the EPA to review every year. While administrative burden is a secondary consideration, relative to achieving the statutory goals of the RFS program, EPA has assessed the claims made by these commenters. One set of comments countered that changing the point of obligation to “position holder” would result in a decrease in the number of RIN transactions because obligated parties would acquire the RINs at blending and retire them without intervening transactions.²¹⁶ The argument follows that the EPA would need to verify fewer RIN transactions, thereby decreasing

²¹³ This is the minimum number of obligated parties that would be expected if EPA changed the point of obligation to the “position holders,” assuming a 30% turnover. The actual number of obligated parties would likely be far higher.

²¹⁴ 133 is 30% of 443 (the number of “position holders” in 2016)

²¹⁵ 40 CFR Part 80 currently allows obligated parties to comply with the RFS requirements at the “facility” level if they so choose, and thus provides for flexibilities for obligated parties to comply as compared to reporting to the IRS. In 2016 the EPA received 191 compliance demonstrations; 93 from aggregated refiners, 59 from individual facilities, and 39 from importers of gasoline or diesel. We note that some of the obligated parties submitted compliance demonstrations as both aggregate refiners and importers of gasoline and diesel.

²¹⁶ Comments from Valero Energy Corporation, EPA-HQ-OAR-2016-0544-0274.

administrative burden. The EPA notes that its compliance monitoring and verification costs have little to do with the number of RIN transactions that occur. Rather, the EPA expends the majority of its oversight resources to monitor and provide compliance assistance for registration activities (including updates to registration after an ownership or personnel change), annual compliance report submissions, RIN retirements, and remedial actions for errors that have occurred. The oversight burden of these activities is directly related to the total number of obligated parties and not the total number of RIN transactions. Furthermore, the EPA notes that current obligated parties submit other compliance reports to EPA to meet other Part 80 requirements, and EPA uses these reports to help verify RFS volumes in the annual compliance reports. If the “obligated party” definition changes to “position holder,” EPA would no longer be able to utilize this data verification method and would need to develop other verification methods to ensure the integrity of the RFS program.

Another set of comments suggested that compliance costs would not increase with an increase in the number of obligated parties because the EPA could get the list of obligated parties along with their verified gasoline and diesel volumes directly from IRS.²¹⁷ In light of these comments, the EPA discussed at length with IRS whether a data sharing agreement could be developed to allow the EPA to obtain this type of detailed IRS data on “position holders.” The IRS stated that tax returns and tax return information are confidential and may be disclosed only as authorized under Internal Revenue Code section 6103(a). “Return information” is broadly defined to include any information gathered with regards to a taxpayer’s liability under the Code, including a taxpayer’s identity. As such, the IRS stated that even a mere list of “position holders” would constitute return information and could not be provided to the EPA without the consent of each “position holder.” Therefore, the EPA has concluded that the commenters’ argument is incorrect and that EPA would be unable to obtain the information it would need from the IRS to identify the “position holders” and determine their obligated volumes of gasoline and diesel and would instead need to develop its own systems to identify obligated parties and track their obligated fuel volumes.

Some commenters argued that “position holders” would have very little compliance burden as obligated parties because they would simply utilize the measurements, calculations, and records already in place to meet IRS requirements.²¹⁸ Likewise, they argued that EPA could simply change its RVOs requirements to equal the volumes reported on Form 720. However, based on a detailed comparison of IRS requirements to RFS requirements, the EPA has concluded that the volumes reported on Form 720 are different than the volumes used to calculate RVOs. Most notably, ethanol and biodiesel that is blended into gasoline and diesel fuel at the terminal upstream of the rack are included in the Form 720 gasoline and diesel volumes, while those biofuels must be excluded from gasoline and diesel volumes used to calculate RVOs. In addition, home heating oil volumes, kerosene, fuel used by ocean going vessels, volumes used in Alaska and the Territories, and volumes that cross a rack a second time are reported on Form 720, while

²¹⁷ See, e.g., Comments from CVR Energy, EPA-HQ-OAR-2016-0544-0396; Comments from the Small Refiners Coalition, EPA-HQ-OAR-2016-0544-0406.

²¹⁸ Comments from Valero Energy Corporation, EPA-HQ-OAR-2016-0544-0274.

those volumes must be excluded in determining RVOs. Data provided to the EPA by the IRS shows that the total volume on which taxes were paid by “S” registrants in 2016 was about 244 billion gallons. The total gasoline and diesel volumes produced by refiners and importers in 2016 according to the RFS compliance reports submitted by these parties to the EPA was about 180 billion gallons.²¹⁹ Therefore, EPA has concluded that obligated parties would not all be able to simply use the Form 720 volumes to calculate their RVOs; a significant number would likely need to take, maintain, and report different measurements than they currently do for IRS compliance purposes. Likewise, the EPA would have to expend significant administrative resources to create regulations, instructions and compliance assurance assistance related to obtaining and verifying the information need for obligated parties to calculate their RVOs.

The Small Refiners’ Coalition and CVR Energy suggested that if the EPA could not obligate “position holders” due to concerns about statutory authority, then the EPA could instead obligate all blenders, and that such a change would not add to the complexity of the program or harm small entities.²²⁰ The EPA disagrees with those conclusions – for the reasons articulated above about the additional complexities associated with designating “position holders” as obligated parties, obligating “blenders,” which includes many “position holders” and other small entities, would also increase complexity in the RFS program, due to an increased number of obligated parties, and potentially very small entities, including retail station owners. These small entities would have additional obligations and requirements, and although they may currently separate and sell RINs, they do not currently have the same requirements as an obligated party. More importantly, however, as discussed in Section III above, EPA does not believe, based on the information in the record, that changing the point of obligation to downstream parties (either “position holders” or blenders) would result in additional production, distribution or use of renewable fuels.

B. The Potential for Noncompliance May Increase if the Point of Obligation is Changed

Currently, many of the obligated parties are large entities with sufficient resources, staff, expertise and tools to comply with registration, reporting and recordkeeping requirements under the RFS program. The EPA is concerned that moving the point of obligation as proposed by the petitioners could bring in many small entities that may not have the resources or expertise to comply. The addition of a number of small entities with relatively less regulatory experience and expertise could lead to increased overall noncompliance with RFS requirements. This could be seen as increasing the overall regulatory burden due to an influx of more parties (many of which may be small businesses) that have little or no familiarity with the RFS program, and it would

²¹⁹ See EPA Annual Compliance Data for Obligated Parties and Renewable Fuel Exporters under the Renewable Fuel Standard (RFS) Program; Table 1. <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/annual-compliance-data-obligated-parties-and#total-gasoline>

²²⁰ See, e.g., Comments from CVR Energy, EPA-HQ-OAR-2016-0544-0396; Comments from the Small Refiners Coalition, EPA-HQ-OAR-2016-0544-0406.

likely also increase the administrative burden on the EPA to help educate these entities to help them comply, and to ensure their compliance.

Further, in any rulemaking to modify the RFS point of obligation, the EPA would need to consider impacts to small entities, as it did in its prior rulemakings. Congress itself considered the relief appropriate for small refineries that are obligated parties, exempting them through 2010 and then allowing for an extension of their exemption if warranted by a DOE study or through the EPA's review of small refinery petitions alleging that their compliance would result in disproportionate economic hardship. The EPA used its discretion in the 2010 RFS2 rule to extend similar relief to the few additional small refiners that did not qualify as small refineries. The EPA convened a Panel under the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA) to consider whether additional relief to small refiners or refineries was warranted. Were we to propose changing the point of obligation, we would need to ensure that small businesses were aware of this proposed change and potential impact to their business by re-engaging in the SBREFA process. Since the statute contains no specific provisions providing relief for small entities that are "position holders" or blenders, the EPA's analysis in considering the need for, and fashioning appropriate relief would potentially be more complex. The SBREFA process includes a number of steps and would take some time to implement properly. For example, before beginning the formal SBREFA process, the EPA would need to engage in outreach with entities that would potentially be affected by the proposed change and provide the small businesses with an early opportunity to ask questions and discuss their concerns with the upcoming rulemaking. Furthermore, we reasonably expect that there would be strong interest from some stakeholders to exempt small businesses from RFS obligations. If exempted, these parties could have a (potentially significant) financial advantage over parties that do have RFS obligations and this dynamic could result in an increasing number of small businesses entering this market. Regardless of the outcome of the SBREFA process, it is clear that the RFS market would experience significant uncertainty in such a transition and that the uncertainty may last for some time.

We expect there would be more non-compliance if we changed the point of obligation because blenders and "position holders" are likely to have less experience and fewer resources to be able to comply with the registration, reporting and recordkeeping requirements under the RFS program. Further, we believe the number of obligated parties would significantly increase, which would place greater strain on limited resources to ensure compliance and conduct program oversight. In particular, the information received from the IRS after the proposed denial was issued has strengthened our rationale for why and how administrative costs and the potential for fraud and/or non-compliance would increase with a change in point of obligation to "position holder." Since there is an approximately 30 percent turnover from year to year in the 720 tax filers program, it would require significant resources to identify those new obligated parties and to verify that no other obligated parties are evading the requirements. It would also require an increase in resources to provide compliance assistance to those new obligated parties as they learn a new program for the first time, or become re-acquainted with it after a period of non-activity. Additionally, while current obligated parties typically have significant assets that could

potentially be used to pay civil penalties and to purchase RINs to replace any determined to be fraudulent, it is reasonable to assume that many “position holders” and blenders have relatively fewer tangible assets or real property. It is possible that companies with few tangible assets could violate the RFS standards, make a quick profit, and shut down or leave the country without being brought to justice for their actions. Even if we were able to locate these parties and prevail in the civil or criminal proceedings, these parties could file for bankruptcy and never have to purchase replacement RINs or pay penalties associated with noncompliance. This could lead to less renewable fuel use than intended, and could unfairly disadvantage other obligated parties that meet their RFS obligations. The decreased potential for EPA to ensure through enforcement actions that the RIN system is made whole for any noncompliance would negatively impact the integrity of the RFS program and introduce still more uncertainty into the RIN market.

In the proposed denial, the EPA argued that placing the obligation on a smaller number of parties with significant assets generally results in a more efficient and therefore more effective program. The EPA stated that refiners and importers generally have greater resources than downstream market participants that enable them to provide oversight of the RIN generators to help ensure that the RINs being traded in the marketplace are valid. Changing the point of obligation, we posited, would require that newly obligated parties make the necessary investments to enable compliance with their new RFS obligations. This could take a significant amount of time and represent a significant financial burden to the new obligated parties, especially as we expected that many would be smaller companies with fewer resources than the existing obligated parties.

The EPA received some comments that “position holders” are big and sophisticated companies that would not be financially burdened by RFS compliance and RIN validity oversight duties. In its engagement with IRS during and after the comment period, the EPA requested from IRS data on the quantity of gasoline and diesel reported by “position holders” in calendar year 2016 in order to assess the size of the companies. The IRS was unable to provide the names associated with each volume of fuel, or the names of the parties that paid excise tax for gasoline or diesel more generally. Instead, the IRS provided EPA with a dataset that grouped the 443 “S” registrants that paid excise tax for gasoline or diesel in calendar year 2016 into blocks of five in descending order of gallons reported; for each block of five registrants, the dataset aggregated the gasoline and diesel gallons reported into one number.²²¹ Grouping the parties that paid excise tax in 2016 in this way resulted in a dataset of 86 data points for the EPA to analyze. The EPA compared this information to similar data available to the Agency from the obligated parties’ 2016 RFS compliance reports. From this information, the EPA compared the volume of gasoline and diesel produced or imported by the 100 largest parties to the total reported volume gasoline and diesel volume in both the IRS and EPA data sets. The 100 largest obligated parties (per the current RFS definition) reported gasoline and diesel volumes that were 95% of the total volumes reported by all obligated parties. Similarly, the 100 “position holders” with the largest volumes

²²¹ For example, IRS reported the quantity of gasoline and diesel reported by the five largest “position holders” in 2016, the volume produced by the 6th-10th largest “position holders,” the volume produced by the 11th-15 largest “position holders,” etc. As noted above, the IRS did not provide the identity of the parties that paid excise tax for gasoline or diesel in 2016. See *IRS Aggregated Volume Data*.

accounted for over 95 percent of all volumes reported by all “position holders” paying excise taxes on gasoline and diesel in 2016. This suggests that the differences between the number of obligated parties under the current RFS regulations and “position holders” is not merely the result of company aggregation, as the proportion of total fuel represented by the 100 largest parties in each data set are similar.

The IRS data also showed that over 99.5% of all gasoline and diesel is sold by the 215 largest “position holders.” This means that the remaining 228 registrants²²² – a majority of “position holders” in fiscal year 2016 – together accounted for less than 0.5 percent of all volumes reported on the IRS Form 720. If EPA changed the point of obligation to the “position holders” of gasoline and diesel as requested by the petitioners, we would expect a large number of new obligated parties. For 2016 alone there would have been an additional 323 obligated parties.²²³ However, since there is approximately 30 percent turnover from year to year in the identity of the “position holders” the total number of parties who would have the role of “obligated party” over the years could be significantly higher and the lack of stability in the pool of obligated parties would mean more difficulty in tracking and accounting for those parties. The EPA expects that a great many of the parties who would not consistently be obligated parties would be obligated for small volumes of gasoline and diesel, since the total volume of obligated fuel from the 228 “position holders” with the lowest volume of reported gasoline or diesel combined is projected to be less than 0.5% of the total obligated volume of gasoline and diesel sold in the United States. This data strongly supports EPA’s assessment that changing the point of obligation to the “position holders” would result in an obligation being placed on a large number of previously unobligated parties, and that many of these newly obligated parties are likely to be small businesses.²²⁴

C. The EPA Would Need to Establish Transition Provisions

The current RFS regulations allow parties to satisfy up to 20% of any given RVO with RINs generated in the previous year, effectively allowing parties to “carry over” a limited number of RINs for use (by them or others to whom they may sell these RINs) in satisfying RFS compliance obligations the following year. Similarly, obligated parties that have an insufficient number of RINs to demonstrate compliance at the compliance deadline may carry forward the deficit into the following year without penalty, provided they satisfy both their deficit and full RVO the following year. Compliance data submitted to the EPA indicates that, in aggregate, parties carried over approximately 2.5 billion 2016 RINs into 2017. While smaller in magnitude,

²²² This number is calculated by subtracting the 215 “position holders” responsible for 99.5% of all gasoline and diesel from the total number of 443 “position holders.”

²²³ This number is calculated by subtracting the number of obligated parties under the current RFS regulations in 2016 (120) from the number of “position holders” that sold gasoline or diesel in 2016 (443)

²²⁴ As discussed further in Section V.B., some parties who would become obligated under a change to the definition of “obligated party” may choose to adjust their business practices to avoid an obligation under the RFS program. If parties were to take this action, this could mitigate some of the concerns raised in this section, but would be unlikely to cause all parties to change their practices and would likely have other ramifications.

a number of parties also carried forward an aggregate deficit of approximately 400 million RINs from 2016 into 2017.

If the EPA abruptly changed the point of obligation to the fuel blenders or “position holders” we would also impact the RVOs for obligated parties in future years relative to what they would have reasonably anticipated under the existing point of obligation, thus raising concerns about fairness. In some cases, these changes could be significant. Refiners and importers with significantly lower RVOs under the new point of obligation may find themselves in possession of significantly more RINs, including carryover RINs, than they desire or can use. Conversely, parties with a significantly higher RVO under the new point of obligation may find themselves with lower balances than they would desire to protect themselves against shortfalls in RIN availability or RIN price volatility. Unlike the current situation, where the number of carryover RINs held by an obligated party is primarily the result of the decisions made by that party under a consistent regulatory structure, the change in the size of each obligated party’s RIN holdings relative to its obligations under the RFS program would be the result in a change in the definition of the obligated parties many years after the point of obligation was established through a notice and comment rulemaking.

While the tradable nature of the RINs in the RFS program would help to mitigate these potential negative impacts, a change to the point of obligation could also cause volatility in the market. Parties with excess RINs could recover some or all of the costs associated with acquiring these RINs, or potentially make a profit, by selling them to newly obligated parties or those who desire to acquire a bank of carryover RINs to protect themselves from future RIN shortfalls or market volatility. The ability for parties that possess excess carryover RINs to recover the cost of the RINs they hold by selling them to other parties, however, will be largely impacted by the effect changing the point of obligation has on the price of RINs. If, as some of the petitioners have suggested, as a feasible or desirable outcome of changing the point of obligation the price of RINs were to fall dramatically, then this change could have a significant negative financial impact on parties that find themselves in the possession of excess RINs due to a change in the point of obligation. Even if EPA were to take steps such as providing significant lead time to minimize impacts, a change to the point of obligation could result in RIN market volatility and disparities in RIN-holdings.

D. Changing the Point of Obligation Would Require Significant Changes to EMTS and Other Electronic Systems

A change in the point of obligation would necessitate changes to the Agency’s registration and reporting systems. This would result in adding complexity and stress to already complex systems. It could potentially lead to degradation in service and reduced availability to all system users. For any given compliance year since 2010, between 1,300 – 1,500 parties participate in the RFS program as renewable fuel producers, RIN owners or obligated parties. Currently, EMTS averages about 23,000 transactions daily.

As discussed previously, shifting the point of obligation downstream could result in about 450 obligated parties in EMTS in any given year. This could result in an increase in EMTS transactions (transfers, separations and retirements) as a larger number of RIN batches (many of them likely of smaller volume) change hands between a greater number of obligated parties, without any increase to the total number of RINs in the system. The OTAQReg registration system would need to be modified to reflect the new definition of obligated party, and both existing non-obligated EMTS participants and new participants would need to register/re-register. Rights and access controls to EMTS would need to be revised to ensure proper reporting and oversight of RIN transactions.

In addition to changes to reflect the additional numbers and roles of registrants in EMTS, changing the point of obligation may require additional functionality for EMTS to take account of changes in business practices and additional potential for non-compliance, including avoiding compliance obligations, failure to identify as an obligated party, or not understanding RFS requirements. The EPA may find that the additional potential for non-compliance requires additional reporting of information not currently tracked in EMTS, such as accounting for movements of physical volumes of gasoline and diesel fuel between potential obligated parties, similar to a designate-and-track system, to ensure that RFS obligations are assigned to the proper parties. Such a system would include additional reporting by parties such as refiners, marketers, and blenders to ensure RFS goals are being met. Ancillary reports such as quarterly and annual compliance reports submitted to CDX and annual attest engagements would also increase in volume and complexity.

V. Changing the Point of Obligation Could Cause Significant Market Disruption

In the petitions the EPA has received requesting a change to the point of obligation in the RFS program, the petitioners generally characterize their proposed changes to the point of obligation as minor or simple. The EPA disagrees with these characterizations and believes that changing the point of obligation would be a significant change for the RFS program, and would likely lead to significant changes in the fuels marketplace more generally.

A. Market Participants Have Made Significant Decisions on the Basis of the Existing Regulations

When EPA first instituted the RFS program in 2007, and again when EPA significantly revised the RFS regulations in 2010 in response to the EISA amendments, the EPA requested and received many comments related to the point of obligation of the RFS program. These comments were carefully considered and the EPA specifically sought the input of the refining industry. The decision to place the point of obligation on refiners and importers in 2007, and to uphold that decision in 2010, was made with the support of much of the refining industry.

Since then all parties regulated in the RFS program have made significant investments and decisions about their participation in the program and their position in the market on the basis of the existing regulations, including the definition of obligated parties. Some parties sought to

increase their access to RINs acquired by blending renewable fuels by expanding their presence at terminals where renewable fuels are blended, or investing in blending infrastructure downstream of terminals. Other parties entered into contracts to purchase renewable fuel with attached RINs and/or separated RINS to satisfy their own needs or for re-sale to obligated parties, while yet others became major renewable fuel suppliers as well. Each year obligated parties decided how to best satisfy current and future RIN obligations, including whether or not to carry over RIN deficits or excess RINs into future years.

Each of these decisions was made with the expectation that each party's RFS obligation in future years would continue to be proportional to the volume of gasoline and diesel fuel they refine or import, as is the case under the current RFS regulations. If the EPA were to change the point of obligation as requested by the petitioners, RFS obligations would instead be proportional to the volume of gasoline or diesel fuel that parties blend with renewable fuel, or the volume of gasoline and diesel fuel sold by parties immediately above the rack. This would substantially impact the relative size of many parties' RFS obligations and would very likely result in efforts to reposition themselves in the marketplace, either by renegotiating contracts or even seeking to buy or sell assets associated with the blending of renewable fuels. If changing the point of obligation of the RFS program were reasonably likely to result in a significant increase in the amount of renewable fuel that was produced, distributed, and used in the United States relative to the current point of obligation such a change may be justified; however, since we do not believe that changing the point of obligation will result in significant increase in the production distribution and use of renewable fuel, these impacts are important to consider.

B. If the Point of Obligation is Changed, Parties Would Be Expected to Reposition Themselves to Avoid or Minimize RFS Obligations

One of the desired outcomes of changing the point of obligation in the RFS program expressed by the petitioners is to shift the obligation to renewable fuel blenders or "position holders" that have access to RINs through the blending of renewable fuels. While assessing these petitions, the EPA received letters from a number of independent fuel marketers and parties that own a large number of retail fueling stations.²²⁵ These parties are generally not currently obligated parties (because they do not typically refine gasoline or diesel fuel, however on occasion some import gasoline and/or diesel fuel), but would likely become obligated parties if the EPA changed the point of obligation as requested by the petitioners as they blend renewable fuels and/or are "position holders" at terminals. In addition to questioning many of the benefits of changing the point of obligation claimed by the petitioners, these parties stated that if the EPA changed the point of obligation they would likely adjust their business practices in an effort to avoid becoming obligated parties, either by purchasing fuels already blended with transportation fuel and/or purchasing fuel below the rack.²²⁶

²²⁵ See Letter from Tim Columbus to Administrator McCarthy, August 15, 2016; Letter from RaceTrac to Administrator McCarthy, August 17, 2016; Letter from QuikTrip to Administrator McCarthy, August 17, 2016; Letter from Pilot Flying J to Administrator McCarthy, August 16, 2016.

²²⁶ Ibid.

In their letters to the EPA, these parties acknowledged that by moving below the rack they may give up a number of advantages that contribute to their profitability, such as the ability to purchase fuel in bulk at a slight discount, the ability to better control their fuel supply, and advantages related to the collection of taxes. Nevertheless, these parties stated that the expected costs associated with becoming obligated parties, primarily the costs associated with developing expertise necessary to manage their new RFS obligations and the documentation requirements, may very well outweigh any benefits currently experienced in their position as renewable fuel blenders and/or “position holders.” In their arguments these parties referenced their experience with California’s LCFS program, which allows compliance obligations to be passed on to the “position holders.” They stated that this has resulted in less competitive markets at the rack, increasing fuel prices for consumers, as many parties sought to purchase fuel below the rack, rather than above the rack, to avoid LCFS obligations. They claimed that this would be especially true for the many small entities currently engaged in the gasoline and diesel fuel spot markets. The EPA primarily spoke with and received written communication from larger businesses that are currently blenders of renewable fuels and/or “position holders,” however any overhead costs associated with being an obligated party would likely be proportionally more significant for small businesses.

If parties that would become obligated parties for the first time if the EPA were to change the point of obligation as requested by the petitioners react as they have claimed in discussions and written communication with the EPA, by adjusting their business practices to avoid becoming obligated parties under the new definition, this would significantly impact the expected results of such a change. Some of the concerns raised by the EPA, such as the large number of new parties that would become obligated parties under the new definition and the relatively small nature of these parties, would be mitigated, as these parties likely would adjust their businesses to avoid becoming obligated parties under the new definition. However, such market restructuring would likely have other market ramifications.

While it is uncertain which parties would ultimately have increased obligations if EPA were to change the point of obligation as requested by the petitioners and independent fuel marketers and retail station owners exit their current market positions as renewable fuel blenders and “position holders,” it is possible that the current obligated parties that do not sell gasoline and diesel at the rack, would take up these positions in an effort to find consumers for the fuel they produce and import. If this were to happen, the end result of this significant market restructuring would be that the RFS obligations would not substantially change from what they are under the current definition of obligated parties. Refiners and importers would likely take on terminal positions and the role of blending renewable fuels abandoned by the parties who currently satisfy these roles in the market. Ultimately, the RFS obligations may not be substantially different in this scenario than they are today, and if this were the case it is questionable if the benefits claimed by the petitioners would not be realized. During the time period when the EPA went through the rulemaking process to change the point of obligation, however, and as the fuels marketplace adjusted to the realities of the change in the point of obligation there would be significant market uncertainty and potential turmoil. To the degree that the EPA invests significant agency resources to enable the change in the point of obligation and fuels industry participants withhold significant investment decisions until the EPA’s final decision and the fallout from the decision

are known, this could have a significant negative impact on achieving the goals of the RFS program.

In comments, those in support of changing the point of obligation suggested that the benefits of being a “position holder” would outweigh any costs of becoming an obligated party under the RFS system, and “position holders” would not change their market practices in order to avoid the RFS obligation, citing to benefits such as “the ability to purchase fuel in bulk at discount, the ability to better control their fuel supply, and advantages related to the collection of taxes.”²²⁷ In contrast, many parties who would become obligated under the Petitioners’ proposed definition stated that they would indeed change their market position or at least reevaluate their position purchasing fuel above the rack.²²⁸ Some stated that they currently purchase some of their fuel above the rack, and some fuel below the rack depending on the costs and market dynamics, indicating that parties would be willing to modify their position in the future as well. Based on the evidence before it, EPA believes some parties would change their market position in response to a change in the point of obligation, and that such a change further supports EPA’s denial.

While changing the point of obligation in the RFS program would be unlikely to better achieve the goals of the RFS program, especially if many of the fuel blenders, independent marketers, and retail station owners change their business practices to avoid becoming obligated parties, these changes could have broader negative impacts in the fuels marketplace. If the independent marketers and retail station owners cease to be “position holders,” we believe the market positions they vacate are likely to be taken up by existing refiners. This could start to reverse the fuel industry’s transition over the last decade to move away from the integrated model in which refiners disinvested from downstream infrastructure at wholesale and retail. The integrated model has previously caused concerns regarding fuel price impacts and manipulation in the market. We believe that changing the point of obligation could provide an incentive for a shift in control to a relatively few large parties upstream and remove choices and flexibilities that downstream businesses have negotiated over the years in order to hold a position in what is currently a highly competitive fuels market. Changing the point of obligation as requested by the petitioners could result in greater market concentration in certain markets. For example, if independent marketers and retailers give up their positions at terminals in an effort to avoid becoming obligated parties it is possible that some terminals could become dominated by a small number of refiners, or even a single refiner. This reduction in competition could result in higher fuel prices for the retail stations that purchase fuel from these terminals, and ultimately for their consumers. This concern was echoed by many commenters.²²⁹ The absence of independent marketer and retail station owners at terminals may also negatively impact the ability for retail station owners to purchase fuel on the spot market, instead forcing them to rely on longer term contracts with refiners to a greater degree. This would further limit the retailers’ options to purchase the lowest cost fuel. These are just examples of the negative impacts that could result from broader market restructuring if the EPA were to change the point of obligation of the RFS program as requested by the petitioners.

²²⁷ See, e.g., Comments from CVR Energy, EPA-HQ-OAR-2016-0544-0396.

²²⁸ See, e.g., Comments from UPS, EPA-HQ-OAR-2016-0544-0076.

²²⁹ See, e.g., Comment from Casey’s, EPA-HQ-OAR-2016-0544-0268; Comments from American Trucking Association, EPA-HQ-OAR-2016-0544-0355.

VI. Other Comments

The EPA received comments contending that the RIN market is “illegal,” as the statute provides that transfer of credits must be “for the purpose of complying” with the RFS program, CAA section 211(o)(5)(B), and that unobligated blenders and RIN traders do not comply with the RFS program.²³⁰ They also state that the “EPA allows entities to generate RINs from blending any volume of renewable fuel,”²³¹ and not just those quantities greater than the statutory volumes, as suggested by the statute.²³² In response, EPA notes that the RIN system was initially established through notice and comment rulemaking with considerable support from stakeholders in RFS1, and then reaffirmed with relatively minor adjustments in RFS2. Thus, the time to seek judicial review of the creation of the RIN compliance system is past. EPA did not reopen this matter in the context of its proposed denial of the petitions seeking a change in the point of obligation, so these comments are beyond the scope of this action. By means of explanation, and without intending by this response to open this resolved matter for further debate or consideration, we note that the RIN system serves two purposes: as a general compliance mechanism, and as a means of implementing the statutes’ credit provisions. These commenters ignore or minimize the compliance mechanism aspect of the RIN system, and EPA’s authority under CAA Sections 211(o)(2) and 301 to establish a compliance program which could include credit elements that extend beyond the specific elements required in CAA Section 211(o)(5).

Monroe Energy stated that the EPA had an obligation to conduct a jobs analysis under CAA section 321(a) before it denied the petitions for rulemaking, citing *Murray Energy Corp. v. McCarthy*, No. 5:14-CV-39 (N.D. W. Va. 2014). The company further stated that, had the EPA performed this jobs analysis, EPA would have recognized the threat of closures and job losses to merchant refineries. First, the EPA notes that on appeal of the district court decision cited by Monroe Energy, the Fourth Circuit Court of Appeals held that CAA section 321(a) does not impose a non-discretionary duty on the EPA. *Murray Energy Corp. v. EPA*, 861 F.3d 529 (4th Cir. 2017). Second, CAA section 321 does not, as this commenter suggests, specify that completion of a jobs analysis is a prerequisite to the Agency's authority to act on a petition for rulemaking or to take any other final agency action. Finally, the EPA has evaluated claims that the RFS program as currently structured harms merchant refiners, and disagrees with the commenter that this is the case *See* Section II.C, *supra*.

The EPA received additional comments that are outside the scope of this determination. Some commenters suggested that conventional biofuels lack environmental and greenhouse gas benefits. Other commenters suggested that the RFS should incent co-processing of renewable feedstocks with petroleum at refineries.²³³ The EPA also received comments suggesting a “diesel

²³⁰ See, e.g., Comments from CVR Energy, EPA-HQ-OAR-2016-0544-0396; Comments from the Small Refiners Coalition, EPA-HQ-OAR-2016-0544-0406.

²³¹ Commenters’ suggestion that RINs may be generated from blending is inaccurate; RINs are generated at the point of renewable fuel production, and can be separated at the point of blending. See 40 CFR 80.1426-27.

²³² CAA section 211(o)(5)(A)(i)

²³³ See Comments from UPS, EPA-HQ-OAR-2016-0544-0076.

disparity:” that refiners that produce a higher percentage of diesel have difficulty meeting their RVO through blending.²³⁴ In addition, some commenters suggested that the RFS program should not include imported biofuel.²³⁵ As these comments are outside the scope of this determination, we decline to address them here.

VII. Conclusion

Congress authorized the EPA to require “refiners, importers, and blenders, as appropriate” to be obligated parties in the RFS program.²³⁶ After reviewing the petitions the EPA has received requesting changes to the point of obligation in the RFS program, reviewing the comments submitted on our proposed denial of these petitions, assessing the relevant data available to the EPA, and speaking with and reviewing written communication from numerous parties that would likely be impacted by the requested change, the EPA continues to believe that the point of obligation is appropriately placed on refiners and importers, consistent with the current regulation. We believe that the parties requesting this change significantly underestimate the scope and impacts of the changes that would result from the number and nature of additional parties that would become obligated parties if the point of obligation were changed. In addition, we do not believe that the evidence indicates that the changes Petitioners have requested would result in additional production, distribution, and use of renewable fuels as transportation fuel in the United States. If anything we believe it could negatively impact renewable fuel volumes, especially during the substantial transition that would be required. Both in the short and long-term, we believe that the program is more likely to succeed with the current set of obligated parties. The EPA has evaluated the functionality of the RIN market and believes that the RIN program provides a generally efficient and equitable means for all obligated parties to meet their compliance obligations, and that the shortfalls in renewable fuels to date are attributable to broader market forces that would be unaffected by merely changing the point of obligation. It is likely that if the changes requested by the petitioners were made, many of the parties that would become obligated parties as a result of the change in the definition of obligated parties would reposition themselves in an effort to avoid or minimize their obligations under the RFS program. Such market repositioning could minimize any long term impacts of the proposed change on the production, distribution, and use of renewable fuel, but may also have far-reaching negative consequences across the fuels marketplace, and increase fuel prices for consumers. In addition, the EPA believes the point of obligation should be retained to promote stability and regulatory certainty.²³⁷ The Administrator is therefore denying the petitions requesting that the EPA initiate a rulemaking process to reconsider or change the regulation identifying refiners and importers of gasoline and diesel fuel as the entities responsible for complying with the annual percentage standards adopted under the RFS program.

EPA has determined that this action is nationally applicable for purposes of CAA section 307(b)(1). since the result of this action is that the current nationally-applicable regulation defining

²³⁴ See Comments from CVR Energy, EPA-HQ-OAR-2016-0544-0396; Comments from Small Refiners’ Coalition EPA-HQ-OAR-2016-0544-0406.

²³⁵ See Comments from the Small Refiners’ Coalition, EPA-HQ-OAR-2016-0544-0406.

²³⁶ CAA Section 211(o)(3)(B)(ii)(I).

²³⁷ In addition, as noted in section III.A. EPA does not interpret the Clean Air Act as authorizing us to place the point of obligation on distributors or on “position holders” that are not refiners, blenders or importers.

obligated parties who must comply with nationally applicable percentage standards developed under the RFS program remains in place. In the alternative, even if this action were considered to be only locally or regionally applicable, the action is of nationwide scope and effect for the same reason, and because the action impacts entities that are broadly distributed nationwide who must comply with the nationally-applicable RFS percentage standards, as well as other entities who are broadly distributed nationwide that could potentially have been subject to such requirements if EPA had elected to grant the petitions seeking a change in the definition of obligated parties.