May 20, 2015

Attention: Docket ID No. EPA-HQ-OGC-2015-0261

Mr. Roland Dubois
Air and Radiation Law Office
Office of General Counsel
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

VIA EMAIL
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Re: Comments on Notice of Proposed Consent Decree; Request for Public Comment
(80 Fed. Reg. 21,718; April 20, 2015)

Dear Mr. Dubois,

The Renewable Fuels Association (RFA) is pleased to submit the attached comments in response to the U.S. Environmental Protection Agency’s (EPA) notice of a proposed consent decree addressing a lawsuit filed by the American Petroleum Institute (API) and American Fuel & Petrochemical Manufacturers (AFPM) (80 Fed. Reg. 21,718; April 20, 2015).

RFA is the leading trade association for America’s ethanol industry. Its mission is to advance the development, production, and use of fuel ethanol by strengthening America’s ethanol industry and raising awareness about the benefits of renewable fuels.

As detailed in the attached comments, RFA supports the timelines established in the proposed consent decree for proposing and finalizing Renewable Volume Obligations (RVOs) under the Renewable Fuel Standard (RFS) for 2014 and 2015. In addition, we support the timeline simultaneously established by EPA for proposing and finalizing the RVOs for 2016.

However, as EPA establishes the 2014, 2015 and 2016 RVOs, we strongly urge the Agency to abandon the flawed waiver methodology it initially used for the proposed rule establishing 2014 RVOs (the proposal was later suspended by EPA). The statutory basis for granting a waiver based on an “inadequate domestic supply” of “renewable fuels” does not allow the Agency to take into account “factors that affect the consumption of renewable fuels,” as it did in the initial 2014 RVO proposal. Further, the statute requires the Agency to take into account carryover Renewable Identification Number (RIN) credits when determining RVOs—something it did not do in the initial 2014 RVO proposal.
In short, the methodology previously used by EPA for the suspended 2014 RVO proposal ultimately rewards the intransigence of oil refiners to invest in renewable fuels infrastructure, protects their market share, and thus blocks increased volumes of cleaner and more sustainable renewable fuels from entering the marketplace. Adopting the same methodology for RVOs in 2015 and beyond would continue to reward oil companies for their stubborn refusal to follow the spirit and intent of the RFS as adopted by Congress.

The RFS was designed to transform the fuel market and force the oil industry to change the status quo—not to perpetuate it. Accordingly, we urge EPA to get the RFS back on track by proposing RVOs for 2014, 2015 and 2016 that comport with statutory requirements and waiver authorities.

Sincerely,

Bob Dinneen
President & CEO
I. RFA supports the timelines established in the proposed consent decree for proposing and finalizing Renewable Volume Obligations (RVOs) for 2014 and 2015. In addition, we support the timeline simultaneously established by EPA for proposing and finalizing the RVOs for 2016. In recent years, uncertainty surrounding the timing of annual RVO rulemakings has negatively affected all stakeholders with an interest in the RFS. Certainty regarding the rulemaking schedule is critically important not only for the parties obligated to demonstrate compliance under the RFS, but also for renewable fuel producers, agricultural feedstock producers, and many other participants in the supply chain. In this regard, we support the rulemaking timelines established in the proposed consent decree and encourage expeditious finalization of the decree.

II. For reasons previously outlined in RFA comments to EPA, the Agency should deny the request from the American Petroleum Institute (API) and American Fuel & Petrochemical Manufacturers (AFPM) for a partial waiver of 2014 statutorily required renewable fuel volumes. The proposed consent decree establishes that EPA must, by Nov. 30, 2015, “…approve or disapprove Plaintiffs’ petition seeking a partial waiver of renewable fuel applicable volumes set forth in CAA 211(o)(2) for calendar year 2014.”¹ In a November 2013 letter to EPA Administrator Gina McCarthy and in comments responding to EPA’s proposed rule for 2014 RVOs, the RFA has previously underscored the fact that the API/AFPM waiver request entirely fails to satisfy the requirements of CAA 211(o)(7)(A), which clearly describes the conditions under EPA may grant a waiver of the RFS requirements.² We hereby incorporate those comments by reference.

III. In establishing the 2014, 2015 and 2016 RVOs, EPA must abandon the flawed waiver methodology it initially used for the proposed rule establishing 2014 RVOs. The statutory basis for granting a waiver based on an “inadequate domestic supply” of “renewable fuels” does not allow the Agency to take into account “factors that affect the consumption of renewable fuels,” and it requires the Agency to take into account carryover RINs.

In November 2013, EPA published a proposed rule establishing RVOs for 2014.³ The Agency proposed to use a waiver to reduce the total 2014 RFS volume by 16% from the statutory level.

¹ 80 Fed. Reg. 21,718.
of 18.15 billion gallons to 15.21 billion gallons. Implicit in the proposed reduction was a 10% cut to the “renewable fuel” category from the statutory level of 14.4 billion gallons to 13.01 billion gallons. EPA attempted to justify the proposed reductions by stating a waiver was necessary to address “...limitations in the volume of ethanol that can be consumed in gasoline given practical constraints...a set of factors commonly referred to as the ethanol ‘blendwall.’”

However, the Clean Air Act clearly does not permit the Agency to take into account “factors that affect consumption” in determining whether to grant a general waiver based on an “inadequate domestic supply” of renewable fuel. Instead, EPA may grant a waiver based on “inadequate domestic supply” of “renewable fuel” only where it finds that the renewable fuel industry lacks the capability to produce the required volumes of renewable fuel, and where there are insufficient carryover RINs available for obligated parties to meet the statutory RVO.

Consistent with Congress’s overarching purpose in establishing the RFS—to compel the transportation-fuel industry to expand the availability and use of renewable fuels by “replace[ing] or reduc[ing] the quantity of fossil fuel present in transportation fuel”—the program authorizes EPA to grant a waiver from its requirements in two carefully and narrowly defined situations:

1. if there is an “inadequate domestic supply” of renewable fuel, Clean Air Act § 211(o)(7)(A)(ii) (codified at 42 U.S.C. § 7545(o)(7)(A)(ii)), or

2. if the implementation of the requirement would “severely harm the economy or environment of a State, a region, or the United States,” id. § 211(o)(7)(A)(i) (codified at 42 U.S.C. § 7545(o)(7)(A)(i)).

In its initial proposed rule for 2014 RVOs, EPA did not claim that the 2014 RVO would severely harm the economy or environment of a State, region, or the United States—and for good reason. The Administrator could not credibly claim that the statutory RVO would lead to such a severe harm to the economy or the environment. Indeed, ethanol has been priced lower than gasoline for most of the past four years and also continues to serve as the lowest-cost source of octane available to refiners and blenders. Moreover, as highlighted in a new analysis from Informa Economics (Attachment A), there is no evidence that buying and selling of RIN credits by obligated parties has had any impact whatsoever on retail gas prices. In addition, corn

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4 78 Fed. Reg. 71,735 (emphasis added)
5 78 Fed. Reg. 71,737 (emphasis added)
6 Clean Air Act § 211(o)(1)(J) (defining renewable fuel to mean “fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in transportation fuel” (emphasis added)) (codified at 42 U.S.C. § 7545(o)(1)(J)).
8 See Informa Economics (May 2015), “Analysis of Whether the Prices of Renewable Fuel Standard RINs Have Affected Retail Gasoline Prices.” Available at Attachment A.
prices are at a five-year low\textsuperscript{9}, and annual consumer food price inflation has been lower on average since the RFS was first adopted in 2005 than in the 25 years prior to adoption.\textsuperscript{10}

Instead of claiming “severe harm,” EPA claimed that the “term ‘inadequate domestic supply’ as it is used under the general waiver authority [can] include consideration of factors that affect the consumption of renewable fuel.”\textsuperscript{11} But the Agency was mistaken for three reasons. \textit{First}, EPA was factually mistaken, as there were no barriers to the consumption of ethanol that could sustain a waiver of the 2014 RVO for “renewable fuel.” \textit{Second}, and more fundamentally, the term “supply” cannot be read to include considerations of “consumption.” \textit{Third}, the terms “renewable fuel,” as defined by the Agency, require EPA to take into account the availability of carryover RINs in establishing the RVO.

Taken together, this means that considerations of “consumption” are irrelevant. Instead, EPA’s sole focus must be on whether there is an insufficient “quantity” of “renewable fuel” available—based on both projections of production capacity and carryover RINs—such that obligated parties could not satisfy the statutorily prescribed RVO.

\textbf{a. The phrase “inadequate domestic supply” of “renewable fuel” is unambiguous, and requires the Agency to find both an inadequate capacity to produce renewable fuels, along with insufficient carryover RINs available to meet the RVO.}

As noted above, the Clean Air Act authorizes EPA to grant a general waiver to “reduc[e] the national quantity of renewable fuel required under [the RFS Program] . . . based on a determination . . . that there is an inadequate domestic \textit{supply}.”\textsuperscript{12} There can be no doubt that the phrase “inadequate domestic supply” refers to the available stock of renewable fuel based on production capacity and carryover RINs—and nothing more.

In interpreting the phrase at issue, EPA is required to follow the well-known, two-step framework established in \textit{Chevron, U.S.A., Inc. v. Natural Resources Defense Council}, 467 U.S. 837 (1984). Here, the text, purpose, and legislative history of the general waiver provisions, along with the structure of the Clean Air Act more generally, all lead to the same conclusion: the term “supply” refers to the available stock of renewable fuel based on production capacity and carryover RINs, and does not include concepts traditionally associated with “consumption.”

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{11} 78 Fed. Reg. at 71,737
\item \textsuperscript{12} Clean Air Act § 211(o)(7)(A)(ii) (codified at 42 U.S.C. § 7545(o)(7)(A)(ii)) (emphasis added)
\end{itemize}
\end{footnotesize}
i. A plain reading of the phrase “supply” of “renewable fuel” means the capacity to produce renewable fuel and any available carryover RIN credits.

The key statutory phrase—“inadequate domestic supply” of “renewable fuel”—refers to the availability of renewable fuel as a commodity based on projected production capacity and existing stocks of carryover RIN credits (which represent previously produced physical volumes of that same commodity). It does not embrace concepts of “consumption.”

Although the phrase “inadequate domestic supply” is not defined in the statute, the term “supply” has a settled meaning in everyday parlance. “Supply” means “the quantity or amount (as of a commodity) needed or available.” The term "supply" is therefore distinct from the concept of “consumption,” which focuses instead on “the act of consuming or using up.”

The waiver provision also speaks to a commodity, “renewable fuel.” It authorizes the Administrator to grant a waiver of the required “quantity” of “renewable fuel” only where there is an “inadequate domestic supply”—i.e., an insufficient amount available—of that commodity to satisfy the RVO’s yearly requirements.

The commodity itself, “renewable fuel,” is defined to mean two things. First, “renewable fuel” includes the physical gallons of “fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel.” Second, “renewable fuel” includes any carryover RINs, which are meant to represent “a quantity of renewable fuel that is greater than the quantity required” in a given year.

As a result, EPA must take into account both the physical gallons of renewable fuel that may be available in a given year, based on production, along with any carryover RINs that are available to obligated parties to meet their obligations under the statutorily-prescribed RVO. In other words, even if the renewable fuel industry’s projected production falls short of the RVO for a given year (or if those projected totals somehow do not count towards the available “supply” of “renewable fuel”), the Agency would still be obligated to take into account the availability of carryover RINs. Those RINs represent a volume of renewable fuel that was produced in the past and that may be credited towards an obligated party’s obligation under the RVO for a given year. Thus, carryover RINs form a component that must be included in determining whether there is an “inadequate domestic supply” of “renewable fuel” sufficient to grant a general waiver. Indeed, it would make no sense to interpret the RFS program to provide that a party may satisfy.

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16 Id. § 211(o)(1)(J) (codified at 42 U.S.C. § 7545(o)(1)(J)).
17 Id. § 211(o)(5)(A)(i) (codified at 42 U.S.C. § 7545(o)(5)(A)(i)); see also 40 C.F.R. § 80.1401 (defining a RIN to mean “a unique number generated to represent a volume of renewable fuel”). EPA has itself adopted this interpretation of the commodity at issue. In interpreting the parallel waiver provision that governs cellulosic biofuel, EPA considered both the projected availability of physical gallons of advanced biofuel and the “significant number of carryover RINS available” to help meet that year’s RVO. EPA, Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49,794, 49,797 (Aug. 15, 2013).
18 See Clean Air Act § 211(o)(5) (codified at 42 U.S.C. § 7545(o)(5)).
its obligation using carryover RINs, but carryover RINs do not factor into whether it is appropriate to grant a waiver from those obligations.

At bottom, EPA may grant a waiver only where there is an “inadequate domestic supply” of the total “quantity” of “renewable fuel”—that is, the projected capacity of the renewable fuel industry to produce physical gallons during the year in question and any carryover RINs that are available to obligated parties.

ii. Congressional intent of the RFS program supports this definition.

The purpose behind the RFS program generally, and the waiver provision in particular, supports a commodity-driven definition of supply—one that accounts for only a shortage of renewable fuel, but does not take into account the infrastructure needed to deliver it to consumers. The very purpose of the RFS program was to “replace or reduce the quantity of fossil fuel present in a transportation fuel.”\(^{19}\) The program achieves this purpose by requiring that the “transportation fuel sold or introduced into commerce in the United States . . . contains at least the applicable volume of renewable fuel” set out in the statutory RVO provision, Section 211(o)(2)(B).

Properly understood, the RFS program was designed to force the oil industry to change the status quo—not to perpetuate it. The only way that the oil industry and its downstream business partners can achieve the statute’s ever-increasing volume requirements is to invest in new infrastructure capable of distributing, blending, and dispensing renewable fuels. Congress, in its wisdom, did not dictate how the oil industry would achieve these goals; instead, it published the targets well in advance of implementation and provided penalties for noncompliance.\(^{20}\)

The entire purpose of this program would be subverted if the oil industry is awarded a waiver after it failed to take the steps necessary to ensure that it was capable of distributing, blending, and dispensing the renewable fuel required of it under the statute. Indeed, it should come as no surprise that the oil industry has actively resisted providing the infrastructure necessary to meet the RFS program’s mandate to “replace or reduce the quantity of fossil fuel present in a transportation fuel.”\(^{21}\) Every gallon of renewable fuel that replaces a gallon of fossil fuel is a gallon less sold by the oil industry. Congress knew that the industry had no incentive to reduce America’s dependence on fossil fuel on its own, so it provided a rigid program to force the industry to make renewable fuels available or pay statutory penalties.

Viewed in this light, it is apparent that Congress intended to allow EPA to grant a waiver only in two narrow situations—both where continued compliance with the statutory RVO would be beyond the oil industry’s control. First, it would be unfair to penalize the oil industry if there was an inadequate domestic supply of the renewable fuel and credits available to meet the

\(^{19}\) Clean Air Act § 211(o)(1)(J) (codified at 42 U.S.C. § 7545(o)(1)(J)).

\(^{20}\) See Clean Air Act § 211(o)(5) (establishing a credit program) (codified at 42 U.S.C. § 7545(o)(5)); see also id. § 211(d)(1), (2) (providing for the imposition of civil penalties and injunctive relief based on noncompliance with the requirements of the RFS program) (codified at 42 U.S.C. § 7545(d)(1), (2)).

requirements of the RFS program. As a result, Congress authorized EPA to grant a waiver if the available supply of renewable fuel and credits was inadequate to meet the program’s requirements.\textsuperscript{22} Second, Congress provided waiver authority where continued compliance with the RVO might cause economic or environmental harm.\textsuperscript{23} But to stave off perpetual claims by the oil industry—that implementing the RVO would, itself, amount to economic harm—Congress set an extremely high bar: the Administrator must find that continued compliance would cause “severe” economic or environmental harm to a State, region, or the United States.\textsuperscript{24}

Beyond these narrow exceptions, Congress provided no avenue for the Administrator to waive the requirements of the RVO. And here, the only obstacles to continued compliance are those that the oil industry has itself erected. For instance, the industry could have easily supported efforts by its downstream partners and franchisees to install blending infrastructure at the terminal or directly at the pump that would facilitate the distribution of blends greater than E10. Indeed, virtually every fueling station in the country has storage tanks capable of holding the regular gasoline and renewable fuels needed to produce blends greater than E10 straight at the pump. But allowing its franchisees to install these “blender pumps” would mean that the oil industry would sell less fossil fuel—the very purpose of the RVO.

Indeed, there is ample evidence that whether oil companies directly “own” America’s 156,000 fueling stations is largely irrelevant. The oil industry doesn’t \textit{need} to physically own retail stations to exert massive influence over which fuels are offered for sale to consumers. Contracts and franchise agreements with distributors and station owners frequently include exclusivity clauses, frightening warning label requirements, multiple product obligations, minimum volume mandates, and other provisions that create major roadblocks to the wider adoption of renewable fuels.\textsuperscript{25}

Granting a waiver now would subvert the very purpose of the RFS program: change the status quo or face penalties.

\textit{iii. The legislative history of the RFS program and the structure of the CAA more generally support this definition. Case law supports this definition.}

The legislative history of the RFS program likewise makes plain that EPA cannot permissibly read the term “supply” to include factors of “consumption.” Congress expressly rejected such an interpretation.

There were numerous proposals before Congress that would have authorized EPA to grant a waiver from RFS requirements where “there is an \textit{inadequate} domestic supply or \textit{distribution}

\textsuperscript{22} \textit{Id.} § 211(o)(7)(A)(ii) (codified at 42 U.S.C. § 7545(o)(7)(A)(ii)).
\textsuperscript{23} \textit{Id.} § 211(o)(7)(A)(i) (codified at 42 U.S.C. § 7545(o)(7)(A)(i)).
\textsuperscript{24} \textit{Id.}
capacity to meet the requirement.” In fact, there were numerous proposals before Congress that would have allowed EPA to take into account “distribution capacity.” Plainly, this language would have permitted EPA to take into account “factors of consumption,” along with circumstances that the oil industry was itself capable of rectifying on its own.

But Congress rejected those proposals. Instead, it limited EPA’s waiver authority to situations where external factors would make it difficult for the oil industry to meet its requirements under the Act—such as “severe” economic harm or an inadequate “supply” of renewable fuel necessary to meet the RFS program’s requirements. The failure of the oil industry to put in place the infrastructure necessary to sell this supply is plainly not a factor that Congress provided for authorizing a waiver.

Beyond the legislative history of the RFS program’s general waiver provision, the structure of the Clean Air Act establishes that Congress did not intend for EPA to take into account “distribution capacity” when deciding whether to grant a waiver under the RFS program, because it only permitted EPA to take into account “supply.” In contrast, when Congress has wished to provide EPA with the authority to take into account “distribution capacity,” it has done so explicitly:

- Section 211(k)(6)(B)(i) and (iii) provides for a waiver of RFG requirements based on “insufficient capacity to supply reformulated gasoline.” Clean Air Act § 211(k)(6)(B)(i), (iii) (codified at 42 U.S.C. § 7545(k)(6)(B)(i), (iii)).
- Section 211(c)(4)(C)(ii) provides EPA with waiver authority to address “extreme and unusual fuel or fuel additive supply circumstances . . . which prevent the distribution of an adequate supply of the fuel or fuel additive to consumers.” Clean Air Act § 211(c)(4)(C)(ii) (codified at 42 U.S.C. § 7545(c)(4)(C)(ii)).
- Section 211(m)(3)(C) allows EPA to delay the effective date of oxygenated gasoline requirements for certain carbon monoxide nonattainment areas if EPA

26 S. Rep. No. 109-74, at 62 (2005) (emphasis added); see also id. at 8 (authorizing a waiver where “there is an inadequate domestic supply or distribution capacity to meet the renewable fuel requirement”).


28 When then-Senator Obama introduced his version of renewable diesel legislation, he did not include a provision authorizing EPA to grant a waiver where there was an inadequate distribution capacity. Instead, his bill provided for a waiver identical to the one that governs the RFS program—where “there is an inadequate domestic supply of renewable fuel.” Renewable Diesel Standard Act of 2005, S. 1920, 109th Cong. § 3 (2005).
finds “an inadequate domestic supply of, or distribution capacity for, oxygenated gasoline . . . or fuel additives” needed to make oxygenated gasoline. Clean Air Act § 211(m)(3)(C) (codified at 42 U.S.C. § 7545(m)(3)(C)).

Plainly, Congress knows how to provide EPA with the authority to grant a waiver when there is inadequate distribution capacity, but it did not provide that authority when it enacted the general waiver provision for the RFS program. Instead, it merely accounted for “supply” unmoored from concepts of distribution capacity. Just as importantly, these other provisions confirm what is already apparent from the text of the statute itself: The term “supply” has a meaning that is distinct from “distribution capacity”; otherwise it would have been unnecessary for Congress to distinguish between “supply” and “distribution capacity.”

Moreover, Congress is presumed to give the same word the same meaning in various provisions of the same statute, and the Supreme Court have cautioned against interpretations that would render words mere “surplusage.” A contrary proposal—reading the word “supply” to include concepts of “distribution capacity”—would violate both canons. It would mean that, although “supply” by itself does not embrace “distribution capacity” in other provisions of the same section of the Clean Air Act, the term “supply” as used in the general-waiver provision was somehow meant to do the work of more than one word here.

In the final analysis, there is simply no way to read the term “supply,” as used in the general waiver provision, to embrace concepts associated with “distribution capacity.” If Congress had wanted to embrace those latter concepts, it knew how to do so.

In light of the foregoing, EPA’s proposed interpretation—reading “supply” to “include consideration of factors that affect consumption of renewable fuel,” including the “infrastructure available for distributing, blending, and dispensing renewable fuels,”—is plainly contrary to the text, purpose, and history of the RFS program, as well as the structure of Section 211 of the Clean Air Act more generally. Indeed, the Agency’s proposal violates nearly every canon of statutory construction.

iv. EPA’s interpretation of “supply” impermissibly contradicts its prior acknowledgement that Congress set a high threshold for grant of a waiver.

Lastly, EPA’s current interpretation of “supply” seeks to lower the threshold under which a waiver may be granted, and directly contradicts EPA’s prior acknowledgement that Congress set a high threshold for the grant of a waiver. In 2008, EPA rejected Texas’s request under section 211(o)(7) for a 50 percent waiver of the RFS. Although Texas’s waiver request was based on a “severe economic harm” argument, EPA’s denial of that request speaks to the broader purpose of the RFS Program and Congress’s intent. As the Agency itself explained, “Congress set a high threshold for issuance of a waiver”:

30 78 Fed. Reg. at 71,737
While the statute does not define the term “severely harm,” the straightforward meaning of this phrase indicates that Congress set a high threshold for issuance of a waiver. This is also indicated by the difference between the criteria for a waiver under section 211(o)(7)(A) and the criteria for a waiver during the first year of the RFS program. In section 211(o)(8)(A) Congress provided for a waiver based on an assessment of whether implementation of the RFS in 2006 would result in “significant adverse impacts” on consumers. A waiver under section 211(o)(7)(A), however, requires that implementation “severely harm” the economy, which is clearly a much higher threshold than “significant adverse impacts.”

EPA found additional support for this interpretation elsewhere in the CAA:

It is also instructive to consider the use of the term “severe” in CAA section 181(a). Ozone nonattainment areas are classified according to their degree of impairment, along a continuum of marginal, moderate, serious, severe or extreme ozone nonattainment areas. Thus, in section 181, “severe” indicates a level of harm that is greater than marginal, moderate, or serious, though less than extreme. We believe that the term “severe” should be similarly interpreted for purposes of section 211(o)(7)(A), as indicating a point that is quite far along a continuum of harm, though short of extreme.

These statements by EPA are, themselves, unambiguous: EPA believed that Congress meant to set a high threshold before the Agency could grant a waiver. This interpretation is reiterated elsewhere in EPA’s denial:

- “EPA believes that generally requiring a high degree of confidence that implementation of the RFS would severely harm an economy would appropriately implement Congress’ intent for yearly growth in the use of renewable fuels, evidenced by the 2005 and 2007 mandates for such growth. In addition, it would limit waivers to circumstances where a waiver would be expected to provide effective relief from harm.”

- “Given the logic of Texas’ approach and recognizing the many varied and complex interrelationships in our modern economy, Texas’ interpretation would amount to a very open-ended and wide ranging waiver provision; EPA does not believe this is what Congress intended. EPA believes that rejecting Texas’

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32 73 Fed. Reg. at 47,172 (emphasis added).
33 73 Fed. Reg. at 47,171-72 (emphasis added).
approach, and implementing a more limited waiver provision that requires a showing that the RFS program itself would severely harm the economy of a State, region or the U.S. will better implement Congress’ overall desire to promote the use of renewable fuels, reflected in enacting the expanded RFS program and mandating the increased utilization of renewable fuels over a number of years.”34

- “In considering waiver requests, EPA takes seriously its responsibility to evaluate whether circumstances warranting a waiver have arisen, while providing the necessary level of stability for this program that Congress intended.”35

With these statements, EPA not only rejected Texas’s waiver petition, but also made plain its belief that Congress set a high threshold for granting a waiver. That high threshold has not been satisfied here.

IV. In establishing RVOs for 2014, 2015 and 2016, EPA must take into account the availability of carryover RINs to assist obligated parties in complying with RVOs. EPA’s proposed handling of carryover RINs in the initial proposed rule for 2014 RVOs was arbitrary and contradicts the Agency’s treatment of carryover RINs in previous rulemakings.

Congress expressly recognized the need to build flexibility into the RFS program that would minimize the economic impacts of variations and anomalies in the marketplace that are beyond the control of the obligated parties, while still allowing obligated parties to comply with the program’s annual requirements. Specifically, Congress created a credit trading system in Section 211(o)(5) intended to add fungibility to the RFS program and allow compliance flexibility for obligated parties. Importantly, the program established by Congress allows trading, borrowing, and banking of the credits.

EPA was mindful of Congress’ intended flexibility as it designed what would become the RFS program’s RIN credit system: “One of our guiding principles in designing the RFS program was to preserve the market mechanisms that keep renewable fuel costs to a minimum.”36 In finalizing the original RFS regulations, EPA established that RIN credits would have a two-year lifespan and that a portion of an obligated party’s current-year RVO could be satisfied with RIN credits generated in the previous compliance year.37 Therefore, if renewable fuel production (and thus the availability of RINs) is reduced in a given compliance year because of an anomaly in the marketplace, obligated parties are still able to meet their obligations by turning in excess RINs generated in the previous compliance year. EPA established a 20-percent cap on the

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34 73 Fed. Reg. at 47,171 (emphasis added).
35 73 Fed. Reg. at 47,183
37 In practice, the life of some RINs can actually span 26 months because annual compliance reports for Year X are not due until February 28 of Year X+1.
amount of the current-year RVO that can be satisfied with RINs generated in the previous compliance year.

Since the beginning of the RFS program, obligated parties have typically blended more ethanol than was annually required by the RFS due to ethanol’s favorable blending economics. The single exception to this likely occurred in 2013, as the worst drought in 50 years reduced the 2012/13 corn supply and ethanol production fell below RFS requirements for renewable fuel. Still, between 2006 and 2012, U.S. ethanol production exceeded the RFS requirements for renewable fuel by a cumulative total of approximately 6.1 billion gallons. Accordingly, a large rolling “bank” of excess RIN credits was accumulated. Because RINs have a two-year life, obligated parties generally retire their oldest RINs first when reconciling their RVOs at the end of a compliance year.

EPA’s exclusion of carryover RINs in its initial 2014 RVO proposal was even more confounding given the Agency’s treatment of surplus RINs in previous rulemakings and administrative actions. In the past, EPA has consistently accounted for the flexibility provided by carryover RINs when proposing annual RVO requirements and deciding waiver requests. For example, in denying requests to waive the RFS in 2012, the Agency relied on an economic model that “…utilizes EPA estimates regarding excess, or ‘rollover’ RINs, that will be available for use for compliance purposes in the 2012/2013 corn marketing year time period.” The Notice further provided that:

[t]he availability of rollover RINs, the beneficial economics of producing ethanol gasoline blends, the generally low level of flexibility of refiners to shift from ethanol over a one year period, and the low price currently in the market for renewable fuel RINs all support the conclusion that waiving the RFS program would not be expected to have any effect on the production of ethanol.

More recently, the final rule establishing 2013 RVOs explicitly included carryover RINs in its assessment of the obligated industry’s ability to comply with statutory requirements.

…[T]he combination of available volumes of advanced and non-advanced biofuel from both domestic and foreign sources, the ability of the transportation sector to consume some quantity of ethanol in blend levels higher than E10, and carryover Renewable Identification numbers (RINs) from 2012 has led us to conclude that the statutory volumes for both advanced biofuel and total renewable fuel can be met in 2013. As a result, we are not

39 77 Fed. Reg. at 70,775 (emphasis added).
reducing the national applicable volumes in the statute for either advanced biofuel or total renewable fuel volume... \(^4\)

Congress added even more compliance flexibility to the RFS program by including a provision to Section 211(o)(5) allowing obligated parties to carry forward a renewable fuel deficit for one year. There is no limitation on the size of the deficit that may be carried forward; Congress required only that the deficit carried forward from the previous year must be completely offset in the current compliance year. Given the substantial amount of excess RIN credits available on the market today and the technical and economic feasibility of expanding ethanol consumption beyond the “blend wall,” it is highly unlikely that obligated parties would need to carry a deficit forward. Still, this provision creates an additional level of flexibility for obligated parties in the event compliance with the 2014 standards become challenging.

Given Congress’s intent to provide compliance flexibility through the RFS credit trading system, and in light of EPA’s previous handling of carryover RINs, we believe the Agency \textit{must} consider the impact of available RIN stocks when proposing and finalizing RVOs.

Analysis of Whether the Prices of Renewable Fuel Standard RINs Have Affected Retail Gasoline Prices

A Whitepaper Prepared for the Renewable Fuels Association
By Informa Economics

May 2015
Key Findings

- Changes in prices of renewable identification numbers (RINs) did not cause changes in retail gasoline prices from 2013 through the first quarter of 2015.
- Retail gasoline prices were driven primarily by movements in crude oil prices and secondarily by changes in the spread between domestic and international crude oil prices and the level of vehicle miles driven in the U.S., which varies seasonally.

Background and Introduction

The Energy Policy Act of 2005 created a Renewable Fuel Standard, which requires gasoline sold in the U.S. to contain at least certain minimum volumes of biofuel. Two years later, the Energy Independence and Security Act of 2007 significantly expanded the previous targets, and the revised Renewable Fuel Standard (known as RFS2) was allocated among specific categories of renewable fuels.

A system of renewable identification numbers was designed by the EPA for compliance with RFS2. A RIN is a 38-digit code representing a specific volume of renewable fuel. RINs are generated by a producer or importer of renewable fuel. Once the fuel is blended, the separated RINs can be used by obligated parties (mainly refiners) for compliance purposes, held in inventory for future compliance, or traded among companies.

Market participants began to realize in early 2013 that ethanol usage could fall well short of levels needed to meet RFS2 going forward, and prices of conventional ethanol RINs (known as “D6” RINs) rose to levels that were multiples of any that had been experienced previously, spiking to nearly $1.50 during July 2013. This was in part a result of the 2012 drought, which reduced the size of the corn crop and led to record-high prices and the idling of ethanol plants in late 2012 and early 2013, as market prices for ethanol were not sufficient to allow producers to offset higher production costs and sustain significantly positive margins. However, RIN prices dropped precipitously during the late summer and early fall of 2013.

In November 2013, the EPA proposed substantial cuts to the volumes associated with all RFS2 standards except the one for biomass-based diesel. The general structure of the proposal had become known to industry and the press in advance of the official release. RIN prices also reached a bottom that month. The EPA proposal was withdrawn in late 2014, and as of this writing the RFS2 volume requirements for 2014 and 2015 have not been issued.

Conventional ethanol RIN prices rebounded to $0.50 by February 2014, and they traded in a range of roughly $0.45-0.55 through November. In late 2014, RIN prices moved
higher, and mid-January through the end of the first quarter of 2015 they centered around $0.70.

On the other hand, gasoline prices fell by one-third between the week of July 4, 2014, and the end of the first quarter of 2015 (Exhibit 1). This was driven by a substantial drop in oil prices.

Some commentators have speculated that RIN prices might have driven retail gasoline prices higher. While such speculation has ebbed since the RIN price spike of mid-2013, such allegations still are in the public discourse from time to time. During and shortly after the initial price spike, difficulties in conducting near-real-time analysis were compounded by limited historical data, as RINs for the different categories of biofuels under RFS2 had only traded since 2010, and for much of their history conventional ethanol (D6) RINs had traded at very low prices.

Now that additional time has passed, the Renewable Fuels Association (“RFA”) commissioned Informa Economics, Inc. (“Informa”) to conduct an analysis of whether the RIN prices changes have been driving gasoline prices for U.S. consumers, or if not, to determine the main factors that actually have caused retail gasoline price changes.
Informa conducted its analysis in two phases. First, Informa used a statistical method to determine whether changes in RIN prices “caused” (i.e., were a significant driver of) changes in retail gasoline prices. Second, a streamlined statistical regression “explaining” gasoline price movements was developed. If the first phase concluded that changes in RIN prices have “caused” changes in gasoline prices, a determination would be made as to whether RIN prices were a statistically significant explanatory variable to be included in the regression developed during the second phase.

**Causality Analysis**

In order to test whether or not changes in RIN prices “caused” changes in retail gasoline prices, a statistical method called a Granger causality analysis was utilized. Weekly average RIN prices reported by OPIS for the period spanning from October 29, 2010, to March 27, 2015, were paired with weekly average retail gasoline prices reported by EIA for the same time period. Prior to use in the Granger models, the data were differenced, and thus, the resulting models were built using the weekly change in RIN prices compared to the weekly change in gasoline prices.

Of primary interest was the question: Did changes in RIN prices cause gasoline prices to change? In the past, the discussion centered around whether higher RIN prices caused higher retail gasoline prices. However, as can be seen in Exhibit 1, retail gasoline prices have fallen dramatically since the summer of 2014, whereas RIN prices were relatively steady through the summer and fall of 2014 before moving to a moderately higher plateau.

To test the question of causation, a two-stage process was utilized. First, an initial model was developed that specified the current change in gasoline price as a function of the previous week’s change in the price of gasoline. Next, a secondary model was constructed identical to the first, except that the previous week’s change in the RIN value was added as an explanatory variable.

The idea behind the Granger causality analysis is simple: If the second model (containing the lagged RIN variable) is superior to the initial model, then this means that the previous week’s RIN price has some explanatory power relative to the current week’s gasoline price. If this is found to be the case, then it can be asserted that gasoline price changes are “caused” to some extent by changes in the RIN price. The term “caused” is used loosely here, since it does not imply that the RIN price was the only factor affecting gasoline prices. In the context of this analysis, the term “caused” would simply refer to the presence of some connection between the change in the RIN price and subsequent changes in gasoline prices.

To determine if one model is superior to another, it is appropriate to look at the size of the error terms associated with each model (i.e., the difference between the actual prices observed and the prices that would have been predicted by the model). If the
errors from one model are significantly smaller than those of the other, this implies that the model has superior predictive power, and thus, is a better representation of reality.

Granger causality analysis compares the sum of squared errors associated with the model containing the RIN variable with the same statistic for the model that does not contain the RIN variable. Exhibit 2 provides the results of the Granger causality analysis. The P-values reported in the table measure the probability that the errors from the unrestricted model (the one containing RIN values) are the same as the errors from the restricted model (no RIN value). There is an 89% probability these model errors are not significantly different, leading to the conclusion that changes in RIN prices do not appear to cause changes in gasoline prices.

**Exhibit 2: Results of the Granger Causality Test**

<table>
<thead>
<tr>
<th></th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIN Price Causes Gas Price</td>
<td>0.886</td>
</tr>
<tr>
<td>Gas Price Causes RIN Price</td>
<td>0.289</td>
</tr>
</tbody>
</table>

--- Significant at 5% Level? ---

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<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RIN Price Causes Gas Price</td>
<td>N</td>
</tr>
<tr>
<td>Gas Price Causes RIN Price</td>
<td>N</td>
</tr>
</tbody>
</table>

P-values are the probability that the sum of squared errors in the unrestricted model is not different from the sum of squared errors in the restricted model.

It is worth noting that as an auxiliary part of this analysis, a second set of models was prepared that reversed the flow of causality, in order to examine whether or not changes in the gasoline price caused changes in RIN values. In the reverse case, there is a 29% probability that there is no difference between the models, and though this is much lower than for the RIN-to-gasoline case – implying that there is a higher probability from a statistical perspective that changes in gasoline prices “caused” changes in RIN prices – this is not considered strong enough to make this conclusion.

In summary, the evidence from the Granger causality work leads to the conclusion that changes in RIN prices have not caused changes in retail gasoline prices (or vice-versa). To any extent that the two are related, it is not a direct causal relationship.

**Gasoline Price Drivers**

Given the results of the analysis above, a second question naturally arises: What does drive retail gasoline prices? Accordingly, the second phase of the analysis examines the key factors that do “explain” retail gasoline price movements. It should be remembered that RINs were created only in the aftermath of the establishment of the Renewable Fuel Standard in 2005, and the differentiation of RINs by biofuel category did not take effect until 2010, whereas gasoline prices have been volatile for decades.
The primary driver of retail gasoline prices is crude oil prices, as crude oil is the primary input in gasoline production. Historically, the running 24-month correlation between crude oil and retail gasoline prices has generally been between 0.80 and 0.99, which indicates a very strong relationship, given that a coefficient of 1.00 would indicate perfect positive correlation (Exhibit 3).

Exhibit 3: Monthly Retail Gasoline and Crude Oil Price Relationship
(December 2001 – March 2015)

This relationship began to show signs of weakening starting in the spring of 2012. One of the key factors behind the weakening has been the divergence between international and domestic crude oil prices and the heightened volatility of the spread between these prices. This divergence was mainly attributable to growing crude oil stocks at inland locations – especially the delivery point for NYMEX crude oil futures at Cushing, Oklahoma – as a result of a combination of increased domestic oil production from shale plays such as North Dakota’s Bakken formation and lagging infrastructure construction to move the oil to consumption centers. The oil-price spread narrowed throughout 2013 and 2014, as infrastructure came online to facilitate movements of crude to the Gulf Coast, but it has remained volatile into 2015.

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1 For each month illustrated in Exhibit 3, the correlation between crude oil and retail gasoline prices during the previous 24 months was examined. Refinery composite crude oil acquisition cost data was utilized to represent crude oil costs for U.S. refineries, as this reflects a weighted U.S. average of imported and domestic crude oil used to produce gasoline.

2 Brent crude oil prices were utilized to represent prices in the international market, and WTI prices were utilized to represent prices in the domestic market.
Another relatively recent development is that the U.S. has emerged as an exporter of gasoline. Brent crude oil serves as an international benchmark and influences the pricing of gasoline in international markets. Consequently, the wide and volatile spread between Brent crude oil prices and U.S. oil prices has also added a layer of complexity to U.S. gasoline-pricing dynamics.

As illustrated within Exhibit 4, the weakening price relationship between crude oil and retail gasoline price followed the growing spread between U.S. West Texas Intermediate (WTI) and Brent crude oil prices. It is also notable that this weakening price relationship preceded the increase in RIN prices that occurred starting in early 2013.

**Exhibit 4: Monthly Brent-to-WTI Crude Oil Price Spread vs. Retail Gasoline and Crude Oil Price Correlation**

*(January 2002 – March 2015)*

Sources: EIA (Prices); Informa Economics (Analysis)

Another factor affecting retail gasoline prices is seasonal demand. There is a distinct seasonal pattern to gasoline prices and crack spreads (i.e., the margins refiniers earn by processing crude oil into transportation fuels, in this case gasoline). Gasoline prices and crack spreads tend to slump during the last quarter of the calendar year, particularly November and December, and then strengthen considerably through the first quarter of the year and remain strong through the summertime driving season (see Exhibit 5). A

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3 It is notable that the chart uses a 24-month correlation, and thus there is a lag between when the Brent-WTI price spread begins to expand and when the correlation between crude oil and retail gasoline prices appears to weaken in the chart.
key factor behind this trend is the increase in vehicle miles driven during the summer months, which is anticipated by the markets and prepared for by refiners.

Exhibit 5: Seasonal Crack Spreads and Vehicle Miles Driven  
(January 2002 – March 2015)

Sources: EIA (crude oil prices), OPIS (RBOB prices), U.S. Department of Transportation (miles driven), and Informa Economics (analysis)

The relative role of each of the above factors in “explaining” movements in retail gasoline prices was estimated econometrically, and results are presented in Exhibit 6. A majority of gasoline price movements can be explained by crude oil prices. A $0.10/gallon increase in crude oil prices ($4.20/barrel) has resulted in a roughly $0.10/gallon increase in retail gasoline prices, all else being held equal. In the model, variables for the Brent-WTI crude oil price spread and vehicle miles driven were also statistically significant, and they improved model performance somewhat. Together these variables explain 95% of the historical retail gasoline price movements (as indicated by the adjusted R-squared statistic).

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4 Monthly data from April 2008 – March 2015 was utilized within this regression.
Exhibit 6: Retail Gas Price Model

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>Coefficient</th>
<th>Statistically Significant at 5% Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.0616957</td>
<td></td>
</tr>
<tr>
<td>Refiner Crude Oil Composite Acquisition Cost</td>
<td>1.02258</td>
<td>Yes</td>
</tr>
<tr>
<td>Brent - WTI Crude Oil Price Spread</td>
<td>0.010008</td>
<td>Yes</td>
</tr>
<tr>
<td>Vehicle Miles Driven</td>
<td>3.88184 * 10^6</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Adjusted R-Squared = .95

Source: Informa Economics

Conclusions

Based on statistical analysis, it can be concluded that changes in RIN prices did not “cause” the changes that occurred in retail gasoline prices in 2013, and this has continued to be the case through the first quarter of 2015.